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ABSTRACT

This book presents statistics on the total population of doctorate degrees granted in all fields by US universities since 1920. Most of the data refer to the period 1920-1961. The book is designed to answer 4 major questions: how many doctorates are there; what are their origins; what are their personal characteristics; and where do they go for postdoctoral employment. Each general question is broken down into subsidiary questions regarding the 150 fields considered, state and regions of doctorate production, individual institutions and their doctoral output in the physical sciences, biological sciences, social sciences, arts and professions, and education, undergraduate institutions, trends in origins and fields, etc. The time lapse between baccalaureate and doctorate award is also analyzed with regard to different fields, marriage, number of dependents and other factors. Factors such as birthplace, state of high school graduation, location of first postdoctoral job are also analyzed. (JS)

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Doctorate Production in
United States Universities
1920-1962

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With Baccalaureate Origins of
Doctorates in Sciences, Arts, and Professions

Compiled by
Lindsey R. Harmon, Director of Research
and Herbert Soldz, Assistant Director of Research
Office of Scientific Personnel
National Academy of Sciences -- National Research Council

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Preface

The rate of innovation in a society is coming to be recognized as highly dependent upon the amount and quality of its high-level manpower. The latter term, intended to be broadly descriptive of persons able to perform the more complex and demanding tasks in a society, includes people with all degrees of education. Typical of this advanced training is the research doctorate (PhD, ScD, EngD, EdD), the subject of this study. Increasingly, however, the high-level roles demand advanced training, and thus the rate of development of modern society is seen to be related directly to the output of men and women who have achieved the highest levels of education. In recent years the number of people and agencies, both public and private, who have become concerned with high-level manpower and associated educational problems has markedly increased. This book is intended to bring together and bring up to date the wealth of information that has accumulated on this subject in the Doctorate Records of the National Academy of Sciences--National Research Council.

The present volume presents statistics relating to the total population of doctorate degrees in all fields granted by United States universities since 1920. Most of the statistics presented relate to the 42-year period 1920 through 1961, during which time 171,000 persons earned third-level research degrees. Just prior to publication, preliminary data became available regarding the doctorate-level graduates of 1962, and the numbers of such cases are included, without further statistical analysis. For the period 1920 through 1956, the Doctorate Records contain information regarding degrees held, and no more. From 1957 on, further data became available through a one-page questionnaire completed by each doctorate-level graduate. These data have been analyzed and a number of tables present further information for this more recent period, relating to backgrounds of the doctorate-holders and to their subsequent employment.

The present volume is the fifth in a series published by the Office of Scientific Personnel of the National Academy of Sciences--National Research Council, describing the Doctorate Records data. The first book, published in 1948, was based on only 14,905 doctorates granted in the science fields from 1936 through 1945. Subsequent volumes added to the numbers and included both more fields and longer time spans. The second book (NAS-NRC Publication No. 382, published in 1955) contained data on 26,312 graduates in science for the period 1936-1950, inclusive. The third (NAS-NRC No. 460, published in 1956), with the same time span, dealt with 22,503 graduates in the social sciences, humanities, and education. The fourth volume (NAS-NRC No. 582, published in 1958) covered all fields and the 21-year time span of 1936-1956 inclusive, and was based on 97,409 individuals. The present volume goes back to 1920, and forward to 1962 and comprises the records of 183,000 men and women in all doctorate fields. Its data are thus cumulative, comprising all that presented in earlier volumes and adding data on 75 per cent more people than the preceding book, together with analyses of data not heretofore possible.

To insure that the data in the Doctorate Records file of the Office of Scientific Personnel were as complete and accurate as possible, they have been double-checked by sending to each school of baccalaureate origin the complete list of its graduates included in the files, with the request that they check it, correct it if necessary, and supplement it if incomplete. Similar lists, together with the IBM cards from which they were compiled, have been supplied to the doctorate-granting institutions for their further check and correction, as well as for whatever statistical or other uses they may have for the data. In spite of all these checks, however, some errors must remain, and a few were discovered too late to make possible corrections in the tables that follow. Where information on mergers of institutions was available, they are listed only once (under the name currently used), and all former graduates of both were included. Likewise, in a number of cases, constituent colleges were combined with their parent institutions. Thus, if a particular school does not appear where it might be expected, the list should be examined for the institution with which it may have been merged. Because of the volume of the data and the intricacy of some of the tabulations, the data have been assembled by computers working from a magnetic tape record file. It was necessary fairly early in the operation to "freeze" this tape record in order that the subsequent results might be consistent and permit checks on the possibility of machine or human error. Where errors of statistical importance are known to be included in the tables, they are acknowledged and corrected in the "errata" page. A number of minor errors not listed there have also been corrected in the permanent DOCTORATE RECORDS file. If additional errors, not previously reported by cooperating schools, are discovered, the authors will be most grateful to be notified of needed corrections.

Over the years many organizations have supported the growth and maintenance of the Doctorate Records file, and many individuals have contributed to its completeness and accuracy. Individual acknowledgments are scarcely feasible, but it should be noted that the entire project was dependent in its early days on the support of the Office of Naval Research, and later that of the Carnegie Corporation and the Ford Foundation. In recent years the National Science Foundation and the U.S. Office of Education have shared the support of the basic file, and the National Science Foundation has provided the funds which made possible the compilation of data for the present book. To all of these and to the many individuals in them and in the cooperating universities we extend our most heart-felt thanks.

M. H. Trytten, Director
Office of Scientific Personnel

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INTRODUCTION

This book is designed to answer a series of questions regarding the nation's output of third-level research degrees such as PhD, ScD, EngD, and EdD; professional degrees such as MD, DDS, and DVM are not included. In their most general form, the major questions are four in number: How many are there? What are their origins? What are their personal characteristics? Where do they go for postdoctoral employment? Each of the above four general questions breaks down into a series of subsidiary ones, and there are a number of other questions not quite so neatly reduced to a few words. In this introduction, we will seek to formulate a few of these and to indicate where in the book the answers may be found.

How many are there? The tables herein provide answers in terms of the total production of doctorates in all fields since 1880*, and for the most recent four decades or so, by 29 separate fields and field groups. During the period since 1957, reliable information has been available with regard to specific fields (about 150 of them) and these production figures are given for each year 1957 through 1962 (Chapter I). Where, geographically, are these doctorate degrees awarded? What is the doctorate production by state and by region? In order to give meaningful answers to these geographic questions, particularly for separate fields or field groups, it is often necessary to group the data by five-year periods or by decades. Chapter I also gives information in such categories as these. Going beyond state and regional break-outs, to the individual schools of doctorate origin, information is given for each institution, for each of five general fields (physical sciences, biological sciences, social sciences, arts and professions, and education). This information is given for each school for each decade since 1920, and is summarized for the entire 1920-1961 period in the Appendix.

What are the pre-doctorate origins of these people? From what regions and states and foreign countries did they come to their doctorate-granting universities? From what undergraduate institutions did they come? How has this flow varied over time, and how does it vary from field to field? For the more general questions, the answers are given in Chapter II. For more detailed data by individual institutions of baccalaureate origin, the Appendix gives information about each United States institution at which the eventual doctorate-holders attained their bachelor's degrees. Because of the large number of such schools, the data are reduced to the five general fields and given for the 42-year period 1920-1961 only. For the 200 largest producers, the data are given for the entire 29 fields, also in the Appendix. Chapter II presents, finally, data on changes of field of specialization during the interval from baccalaureate to doctorate degree; this information, however, is available only for the graduates from 1957 through 1961.

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* This booklet contains data only for the period since 1880. Data for earlier periods are subject to some question. For information on pre-1880 doctorates, see THE PRODUCTION OF DOCTORATES IN THE SCIENCES, published by the American Council on Education, Washington D.C., 1951, or AMERICAN UNIVERSITIES AND COLLEGES, Washington D.C., 1960, pages 1144-1145.

Scholars interested in higher education, and government agencies concerned with such matters as fellowships, have come to recognize the importance of analyzing some of the personal characteristics of people obtaining advanced degrees. What is the time lapse between the baccalaureate and doctorate degree? Is it increasing or decreasing? Is it the same in all fields? How does the greater tendency toward early marriage and acquisition of dependents affect the length of time required for completion of the doctorate? Chapter III seeks answers to these and a number of other questions, some of them relating to geographical factors such as place of birth, state of high school graduation, and location of first postdoctoral job as well as category of employer, and other aspects like age at doctorate, sex distribution by doctorate field, and citizenship. In many instances, where tables would become too bulky for inclusion within the chapter, more detailed information is given in the Appendix.

With respect to all of these questions, and many more that are raised by examination of the data of all three chapters, only partial answers can be given within the limits of a book of this size. It is hoped that the information presented will be useful to the schools from which these people have obtained their baccalaureate and doctorate degrees, as well as to the students and faculty members. Ultimately, however, the greatest contribution may well be the stimulus thus provided for further search for answers by the various schools involved, in an effort to make the over-all picture ever more complete and meaningful

ERRATA SHEET

for

Doctorate Production in United States Universities 1920-1962, Publication 1142

a. In Table 14, Goucher College (60 BA's, 2.0) should substitute for G.W.U. as the next largest BA source for the Johns Hopkins University.

b. In Appendix 4, Texas Christian University is to be found on page 89, while alphabetically it should be on page 114.

c. Figure 14 and Table 18 should be labelled 1958-1961, rather than 1957-1961.

d. On page 118 there is a mis-labelling of three Wisconsin colleges. Substitute as follows:
Platteville for River Falls
River Falls for Stevens Point
Stevens Point for Superior (3506)

e. In Table 26, pages 52 and 53, there was difficulty with the computer for the larger totals for the male PhD's. The Grand Total line should read:

Total, Physical Sciences	50,211
Total, Natural Sciences	78,469
Total, Soc. Sci., Arts, Eudc.	73,029
GRAND TOTAL, ALL FIELDS	151,469

CHAPTER ONE

DOCTORATE OUTPUT TRENDS

Over a span of 80 years, including wars and times of peace, depressions and times of prosperity, doctorate output in the United States has grown at a rate which would average about seven percent per annum if growth were smooth and continuous. It has not been smooth, however, but has varied greatly depending upon the conditions of the times. It was slowed markedly by the great depression of the 1930's, and dropped sharply in World Wars I and II. Data on this growth have been gathered from several sources. For the earliest period (1880-1897) the only dependable record is that of the United States Office of Education. For the next period (1898-1915) the best record appears to be that compiled by J. McKeen Cattell, Editor of Science, who made a great effort to exclude degrees of doubtful quality which were frequently granted in that period by schools without adequate facilities. For the period 1916-1919, the best available data appear to be those compiled by Callie Hull of the library of the National Research Council. From 1920 on, the data here presented were compiled directly by the Office of Scientific Personnel of the National Academy of Sciences--National Research Council.

Despite all the variations in sources for the doctorate output growth of the earlier years of graduate education, a reasonably consistent data series is found. Table 1 presents the record, compiled from the sources named above, for the total period 1880 through 1962.

Table 1

DOCTORATE PRODUCTION IN U.S. UNIVERSITIES, 1880-1962, ALL FIELDS COMBINED

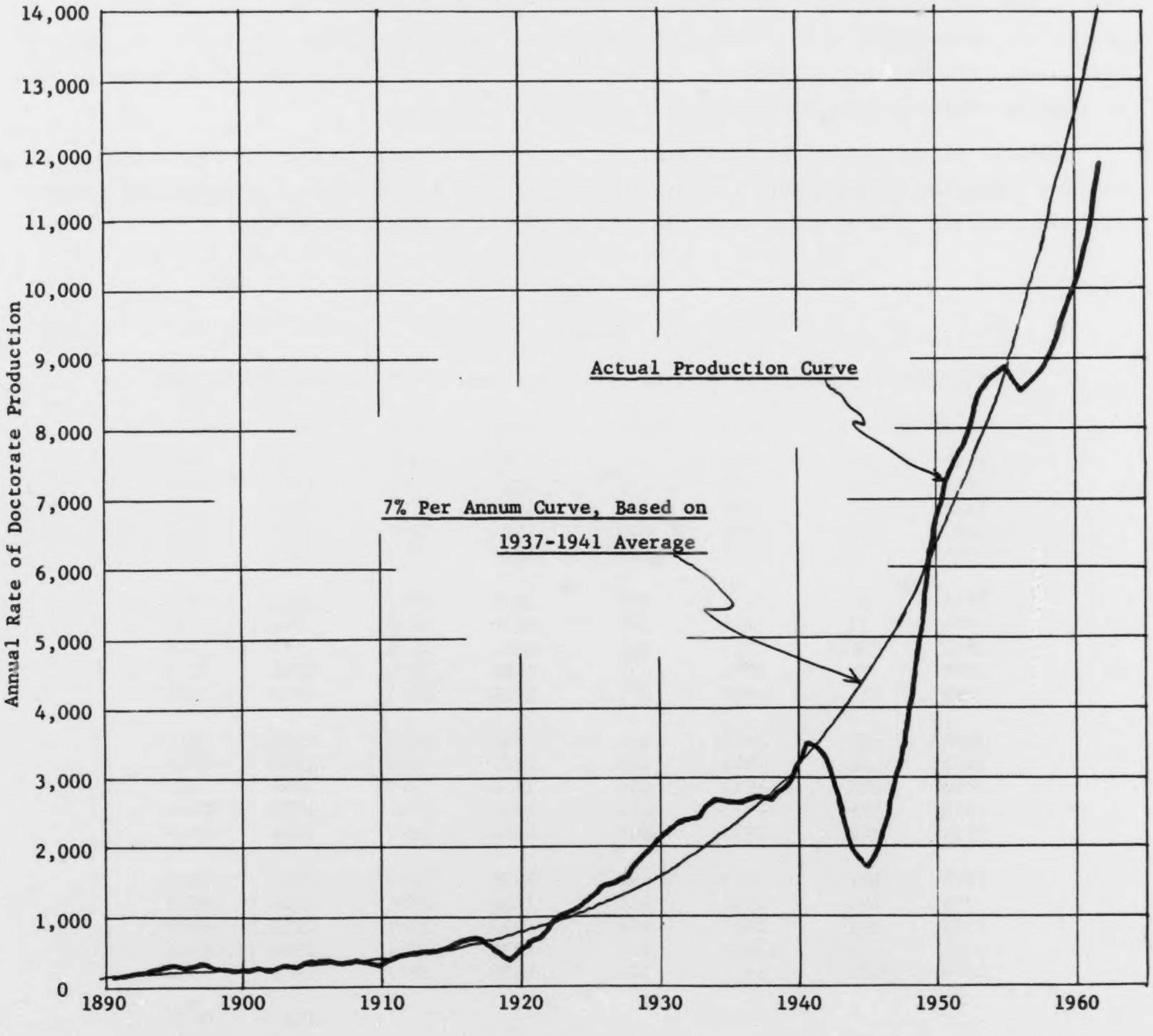
Year	PhD's	Year	PhD's	Year	PhD's	Year	PhD's
1880	45	1900	239	1920	560	1940	3245
1881	40	1901	255	1921	660	1941	3566
1882	43	1902	224	1922	780	1942	3386
1883	(44)*	1903	270	1923	1062	1943	2564
1884	46	1904	289	1924	1124	1944	1939
1885	59	1905	325	1925	1203	1945	1629
1886	33	1906	326	1926	1438	1946	1988
1887	(56)*	1907	327	1927	1538	1947	2949
1888	79	1908	379	1928	1617	1948	3893
1889	121	1909	391	1929	1907	1949	5396
1890	135	1910	362	1930	2058	1950	6517
1891	139	1911	445	1931	2329	1951	7332
1892	166	1912	484	1932	2397	1952	7710
1893	195	1913	471	1933	2452	1953	8369
1894	242	1914	502	1934	2692	1954	8716
1895	245	1915	556	1935	2582	1955	8899
1896	244	1916	611	1936	2749	1956	8473
1897	298	1917	664	1937	2749	1957	8600
1898	236	1918	558	1938	2731	1958	8840
1899	224	1919	371	1939	2847	1959	9358
						1960	10002
						1961	10801
						1962	11872+ (prelim.)

* by interpolation; actual data missing

These data (from 1890) are displayed graphically in Figure 1, which also includes a smooth curve of a theoretical growth rate of seven percent per annum, projected backward and forward from the "normal" period immediately preceding World War II. The general agreement, over a sufficiently long time span, of the actual and the theoretical growth curve indicates that this may serve rather well as a long-time predictor of future growth. It is apparent upon a little reflection that such a projection is necessarily limited, however, as the population growth rate is only about 2-2.5 percent per annum, and these curves would eventually intersect. For the next two or three decades, however, no such limitation to the potential growth rate is implied.

Figure 1

DOCTORATE PRODUCTION IN UNITED STATES UNIVERSITIES, 1890-1962

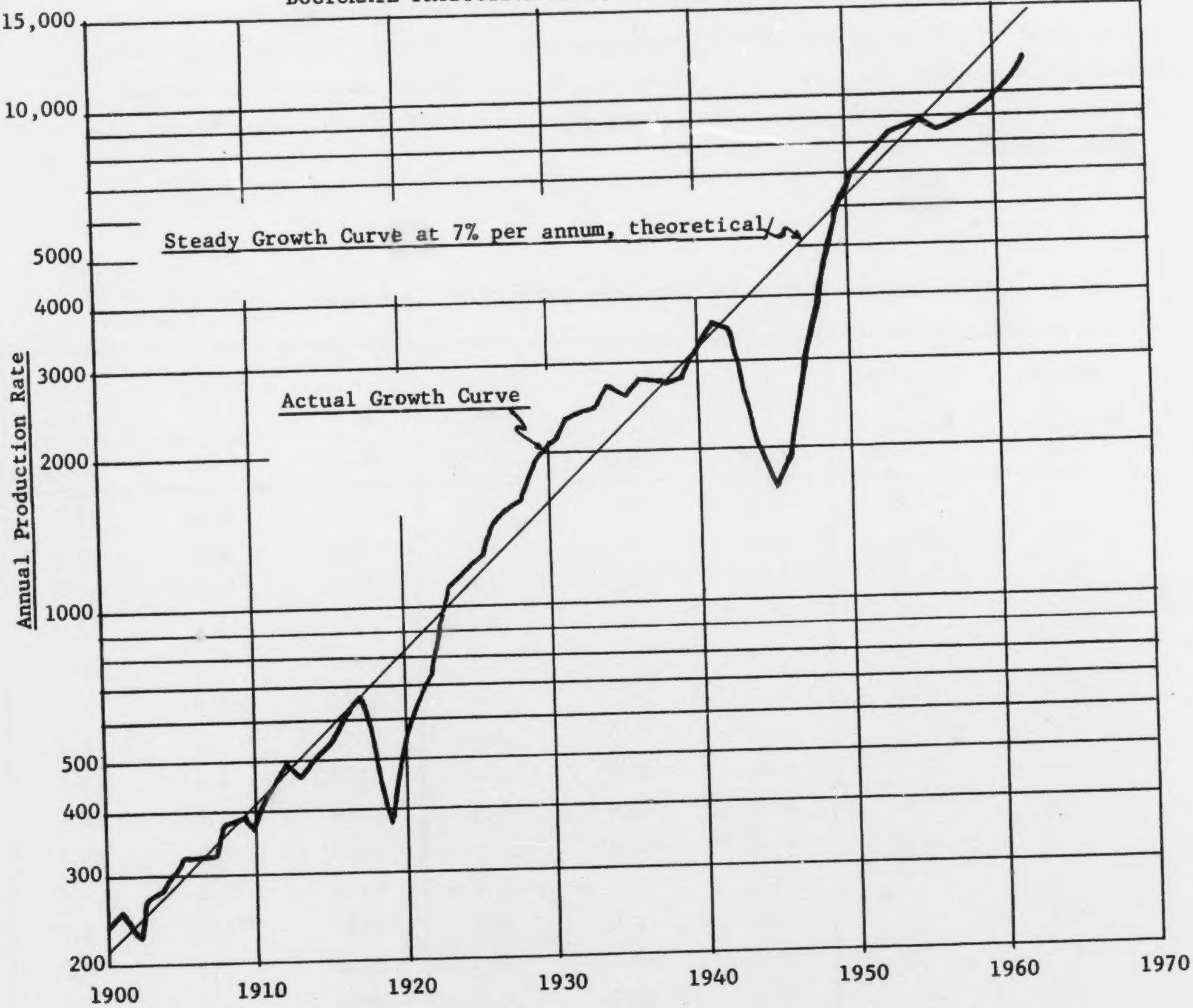


Semi-logarithmic charts

In order to see these data more insightfully, it is useful to plot the growth of doctorate production on semi-logarithmic paper, which projects a given percentage of growth as a straight line, thus simplifying the extrapolation to any future period. This has been done in Figure 2, which includes all doctorate fields but is limited to the period since 1900. It is worthy of note that this figure brings more sharply into focus the changes in growth rate, including notably the slowing down during the depression of the 1930's, and the recent climb in growth rate to 10 percent per annum from 1961 to 1962. Noteworthy, too, is the slump following the recovery from World War II.

Figure 2

DOCTORATE PRODUCTION IN U.S. UNIVERSITIES, 1900 to 1962



This slump, it has been ascertained from examination of the records of a substantial portion of the cases, was occasioned by the delay in first entry into college caused by induction into the Armed Forces during World War II. Going back to World War I, evidence for such a secondary effect is very meagre, probably because of the short duration of the war following United States entry. Looking ahead, it can be seen that the projection of the present 10 percent per annum growth rate would bring about an intersection of the theoretical seven percent curve with the actual curve in about 1969. Whether such an intersection will occur depends, of course, on social conditions, including principally the support of graduate education, over the intervening years.

Growth Rates

In considering the potentialities for future growth, it is instructive to look at the question in terms of annual growth rates--that is, the output each year as a percentage of the previous year. In these terms, static growth would be 100 percent, and declines would be recorded as percentages less than 100. Customarily, these are translated into changes, plus and minus, from 100 percent. When the growth over the past 43 years is considered, the data of Table 2 emerge.

Table 2

ANNUAL RATE OF CHANGE IN DOCTORATE PRODUCTION, 1920-1962

Year	% Change* from Previous Year	Three-** Year Moving Average	Year	% Change from Previous Year	Three-Year Moving Average	Year	% Change from Previous Year	Three-Year Moving Average
1920	50.9	11.8	1934	9.8	2.7	1948	32.0	39.6
1921	17.9	29.0	1935	-4.1	4.1	1949	38.6	30.5
1922	18.2	24.1	1936	6.5	0.8	1950	20.8	24.0
1923	36.2	20.1	1937	0.0	1.9	1951	12.5	12.8
1924	5.8	16.3	1938	-0.7	1.2	1952	5.2	8.7
1925	7.0	10.8	1939	4.2	5.8	1953	8.5	5.9
1926	19.5	11.2	1940	14.0	9.4	1954	4.1	4.9
1927	7.0	10.5	1941	9.9	6.3	1955	2.1	0.5
1928	5.1	10.0	1942	-5.0	-6.5	1956	-4.8	-0.4
1929	17.9	10.3	1943	-24.3	-17.9	1957	1.5	-0.2
1930	7.9	13.0	1944	-24.4	-21.6	1958	2.8	3.4
1931	13.2	8.0	1945	-16.0	-6.1	1959	5.9	5.2
1932	2.9	6.1	1946	22.0	18.1	1960	6.9	6.9
1933	2.3	5.0	1947	48.3	34.1	1961	8.0	8.5
						1962	10.6	----

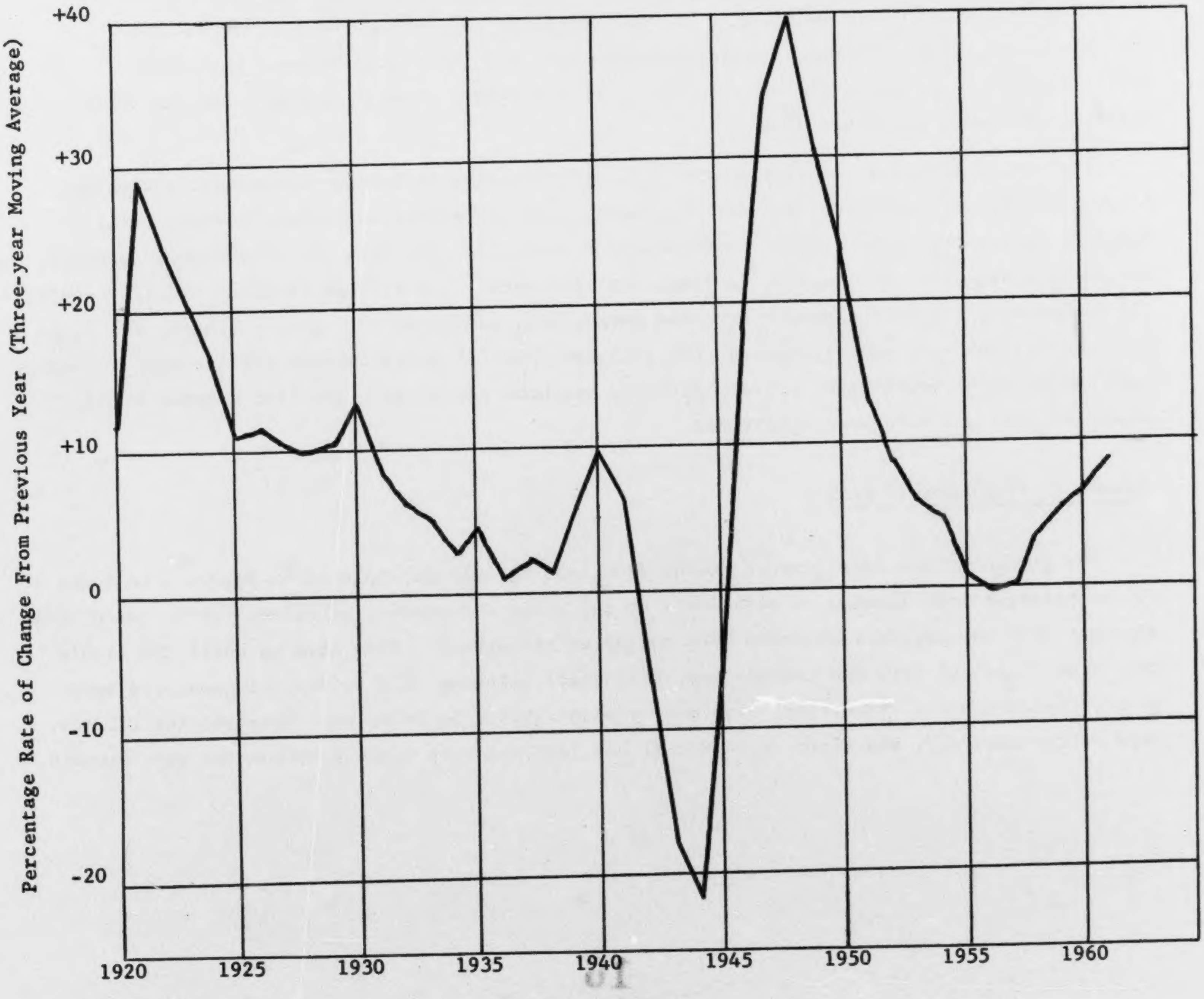
* formula: $100\left(\frac{\text{given year}}{\text{previous year}} - 1.0\right)$

** $\frac{\text{given year + previous year + following year}}{3}$

These data show marked fluctuation from one year to the next, but when a three-year moving average is computed, as shown in the third column of Table 2, the trend is smoothed. This smoothed trend is displayed graphically in Figure 3. It is immediately apparent that the "normalcy" period following the recovery from World War I saw an annual growth rate of over 10 percent per year, until interrupted by the depression of the 1930's. In the late 1930's, recovery was rapid until the entry of the United States into World War II, with its resulting catastrophic drop in graduate education. The recovery during the "GI Period" and the secondary slump due to deferred college entrance also show clearly. The steady climb since 1957 indicates the good possibility of the curve equalling or exceeding the 10 percent level of the late 1920's. The curve stops with 1961 because each entry is a composite of three years, centered on the middle one. Thus, although the 1961-1962 growth rate was itself 10 percent, the moving average lags by one year.

Figure 3

THREE-YEAR MOVING AVERAGE OF TOTAL DOCTORATE PRODUCTION GROWTH RATES 1920-1961



Field Categories

Thus far, only total doctorate output has been considered. The proportion of this total output represented by the several fields is of considerable interest. Here we have reliable and consistent data only since 1920, and even during this period there have been some changes in field categories which produce minor discontinuities. However, the breakout of the total into five general categories, and the division of four of these into subfields, results in a very useful set of individual field growth curves. These are presented in Table 3, showing the categories used throughout this book. The five main fields are physical sciences, biological sciences, social sciences, arts and professions, and education. The first four are further sub-divided, the categories of the physical sciences being mathematics, physics (including astronomy), chemistry, geo-sciences, and engineering.

The biological sciences are somewhat more complex, being divided into nine categories as follows: (1) agricultural sciences, including agriculture, horticulture, forestry, fish and wildlife, animal husbandry, and agronomy; (2) medical sciences, including medicine and surgery, pharmacy, public health, veterinary medicine, optometry, dentistry, and hospital administration; (3) anatomy, including cytology, histology, and embryology; (4) physiology, including pharmacology and pathology; (5) biochemistry; (6) botany and phytopathology; (7) microbiology; (8) zoology, including entomology; and (9) miscellaneous, including biophysics and biometrics, ecology, genetics, hydrobiology, general biology, and any other special sub-fields not noted above.

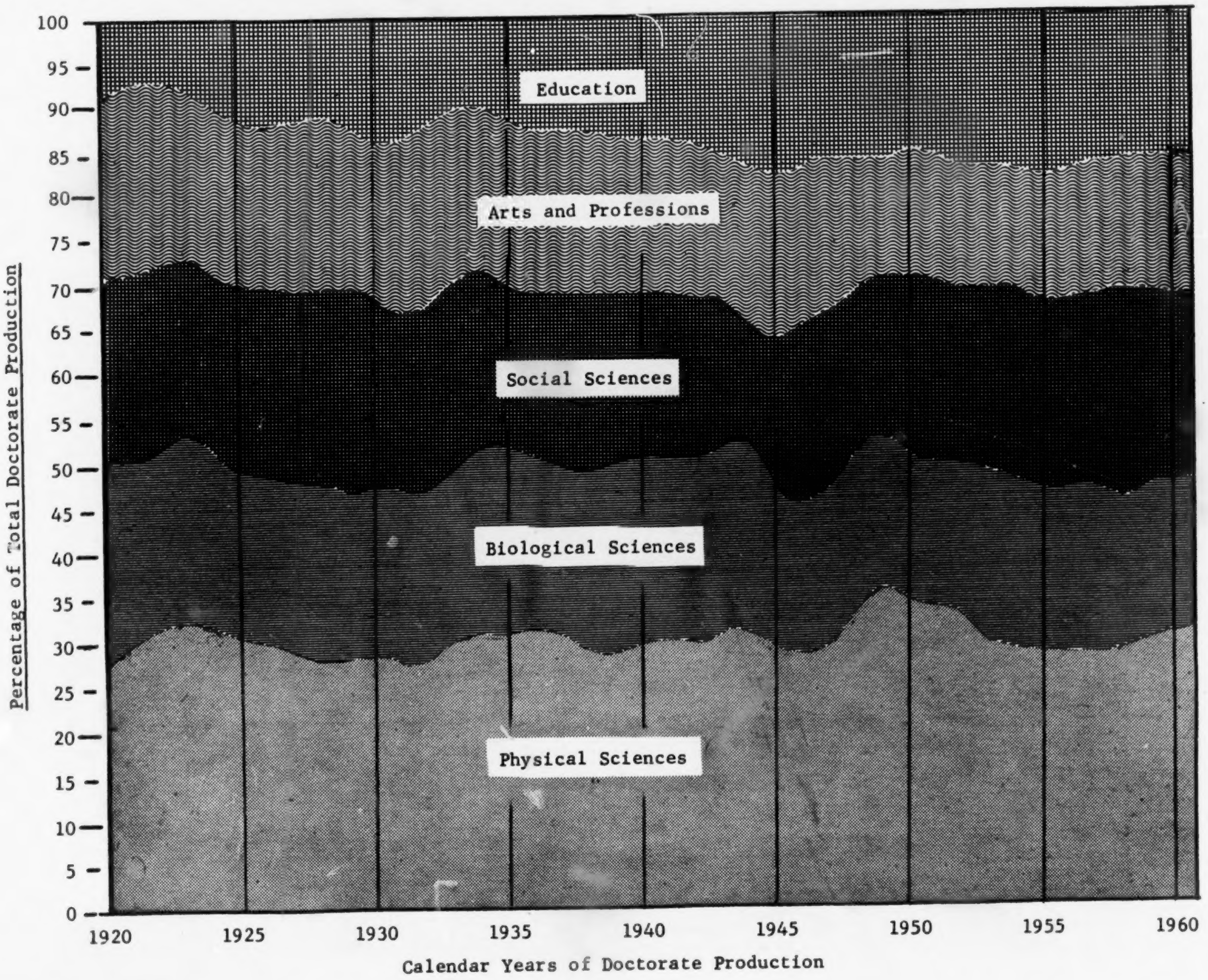
The social sciences comprise psychology; anthropology, including archeology; sociology; economics; history; political science and public administration; and miscellaneous social sciences (geography, area studies, and other and general). The arts and professions category has seven divisions: (1) English language and literature; (2) foreign language and literature; (3) philosophy; (4) miscellaneous arts and humanities, including art, music, speech, and linguistics; (5) business administration; (6) religion; and (7) miscellaneous professions, including law, social work, journalism, library science, and home economics. The last general field, education, has not here been subdivided.

Growth of Five General Fields

The growth of the five general fields from 1920 to 1962 is depicted in Figure 4 in terms of the relative contribution of each field to the total doctorate production. It is immediately apparent that the physical sciences have dominated throughout. From 1920 up until the 1950's the three fields of arts and professions, biological sciences, and social sciences were very nearly the same size. Education, from a very minor status in 1920, has increased its relative size rather steadily, and since World War II has followed very closely behind the bio-sciences.

Figure 4

VARYING PROPORTIONS OF DOCTORATE PRODUCTION OVER 42-YEAR PERIOD

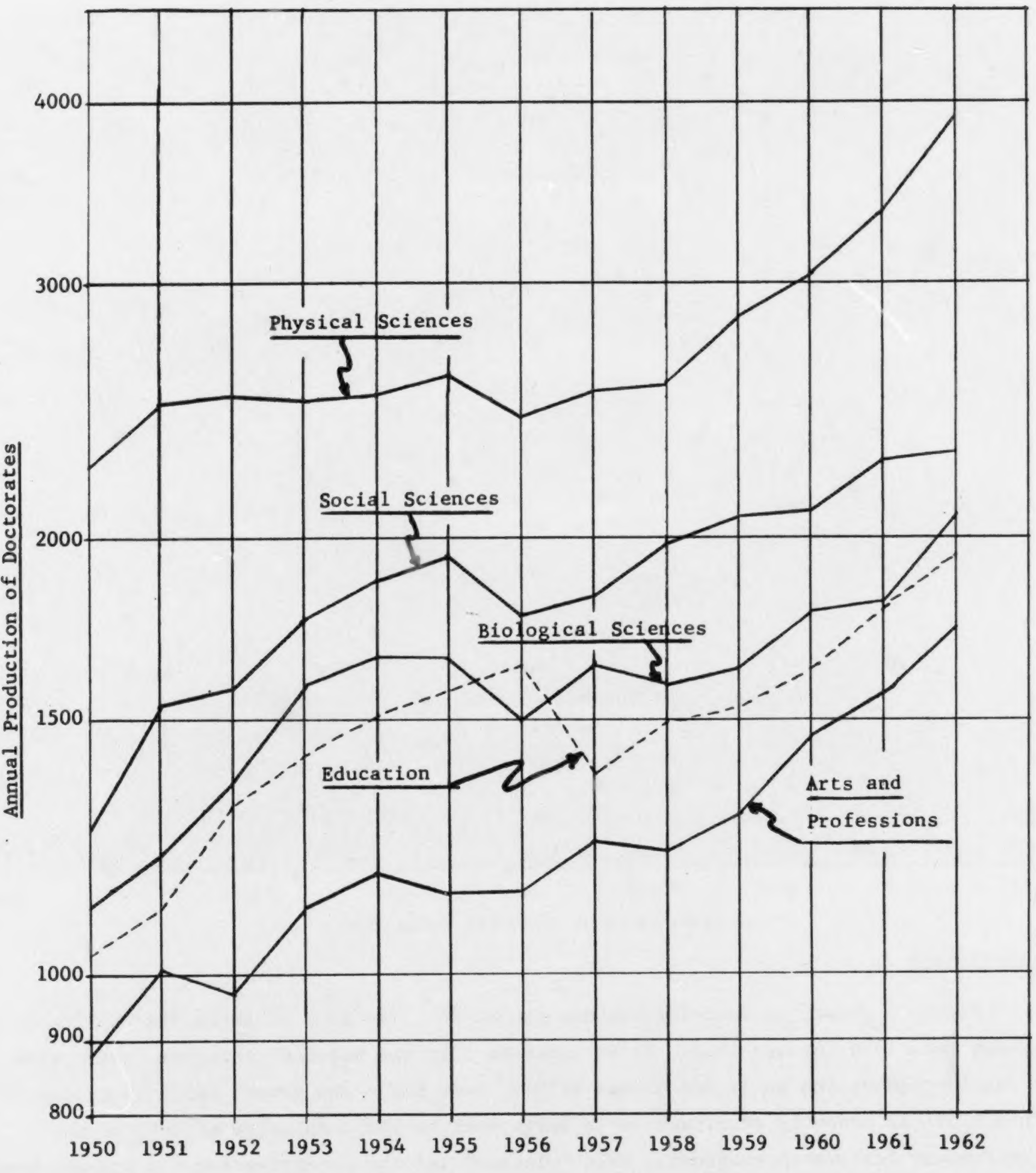


Growth Since 1950

Figure 5 shows, in semi-logarithmic projection, the size of these five fields in gross numbers from 1950 through 1962. It is apparent that the physical sciences, which were on a plateau throughout the early and middle 1950's, have had a new growth spurt beginning in 1958. This spurt is probably attributable in large part to the cumulative effects of the massive government fellowship programs. This "plateau" is less extensive for the bio-sciences, and still shorter in the social sciences and education. In the arts and professions it appears only as a slowing down, followed by a long curve of acceleration that promises to go higher, perhaps again intersecting the bio-sciences, social sciences, and education.

Figure 5

DOCTORATE PRODUCTION IN FIVE MAJOR FIELDS, 1950-1962



Special attention has been focussed during recent years on the physical sciences, which here include engineering and mathematics--what have been termed the "E.M.P." fields. Changes within this group are of considerable interest, and are shown graphically in Figure 6, which is also limited to the period since 1950, and is presented in semi-logarithmic form. It is apparent here that the relative position of chemistry has shifted, and that the output leadership within the E.M.P. fields is now with engineering, which, prior to World War II was a minor field at the doctorate level.

Figure 6

GROWTH OF PHYSICAL SCIENCE FIELDS 1950-1962

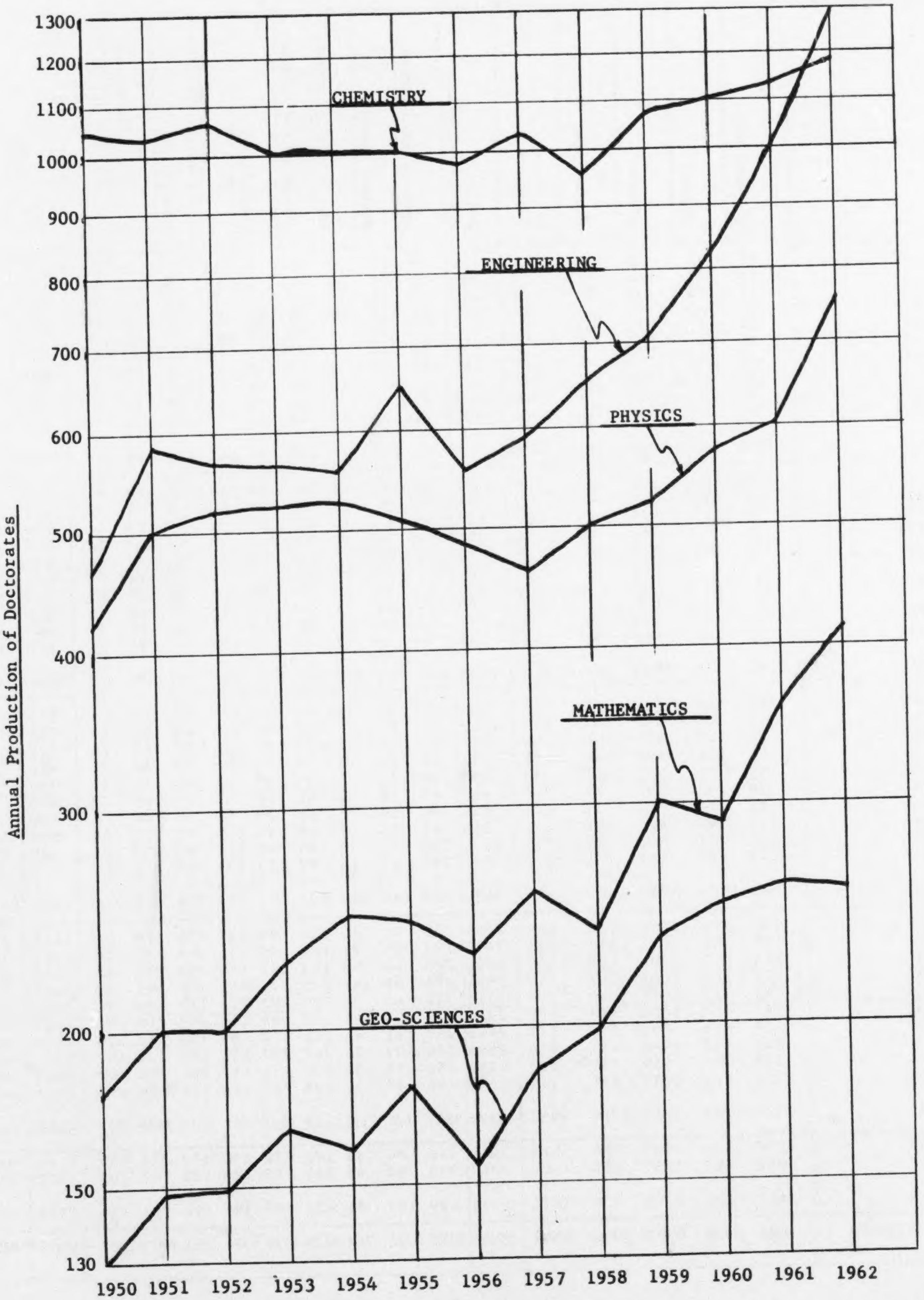


Table 3

DOCTORATE PRODUCTION BY YEAR AND DECADE, 1920-1961, PHYSICAL AND BIOLOGICAL SCIENCES

	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat., Cytol., Embryol.	Physiology and Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology and Entomology	Bio-Sciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
1920	19	31	75	21	8	154	9	11	2	19	9	33	9	21	20	133	287
1921	15	37	125	12	10	199	10	25	6	16	7	18	8	25	18	133	332
1922	17	55	138	22	15	247	17	16	3	14	18	33	12	26	20	159	406
1923	34	60	185	40	13	332	25	24	10	25	11	55	27	38	28	243	575
1924	29	62	223	44	14	372	20	25	4	30	20	42	7	41	24	213	585
1925	28	51	209	27	16	331	22	28	5	23	22	49	22	50	24	245	576
1926	48	86	252	42	27	455	24	29	9	20	32	51	21	44	28	258	713
1927	51	80	215	45	33	424	32	21	14	32	44	36	20	53	38	290	714
1928	42	93	253	31	50	469	37	16	9	26	37	59	29	72	41	326	795
1929	68	96	249	48	41	502	41	28	15	46	38	65	20	74	42	369	871
1920-29	351	651	1924	332	227	3485	237	223	77	251	238	441	175	444	283	2369	5854
1930	74	106	297	66	64	607	39	37	7	44	41	69	25	75	41	378	985
1931	81	111	329	42	68	631	51	37	11	56	36	60	49	103	66	469	1100
1932	74	115	328	54	67	638	55	29	19	49	37	89	44	94	40	456	1094
1933	75	133	382	74	91	755	62	34	21	52	49	70	47	87	52	474	1229
1934	92	124	415	66	117	814	70	46	20	68	60	78	50	125	56	573	1387
1935	79	138	383	73	110	783	72	33	23	46	57	79	30	124	54	518	1301
1936	77	140	455	72	70	814	55	33	19	90	11	100	48	167	22	545	1359
1937	74	159	504	54	91	882	54	16	14	92	22	97	50	144	15	504	1386
1938	61	154	406	69	67	757	54	30	14	82	108	99	40	131	27	585	1342
1939	93	156	464	59	61	833	54	16	17	72	116	100	52	139	22	588	1421
1930-39	780	1336	3963	629	806	7514	566	311	165	651	537	841	435	1189	395	5090	12604
1940	105	144	524	63	104	940	81	30	16	86	127	112	59	173	29	713	1653
1941	97	186	650	67	117	1117	91	31	20	108	104	107	68	162	25	716	1833
1942	76	155	591	66	90	978	91	29	12	88	137	115	67	162	26	727	1705
1943	43	130	506	42	51	772	65	19	9	74	115	87	52	113	26	560	1332
1944	43	63	469	17	63	655	42	29	6	35	97	47	43	70	11	380	1035
1945	38	43	292	25	65	463	45	18	6	41	72	44	26	47	10	309	772
1946	53	71	322	37	101	584	39	19	6	40	30	60	30	84	8	316	900
1947	116	148	425	61	116	866	81	25	7	48	45	105	72	127	18	528	1394
1948	117	224	606	67	257	1271	100	37	12	73	91	114	69	157	36	689	1960
1949	147	319	941	121	448	1976	180	43	15	99	123	137	104	214	27	942	2918
1940-49	835	1483	5326	566	1412	9622	815	280	109	692	941	928	590	1309	216	5880	15502
1950	177	421	1050	130	467	2245	243	52	20	116	125	187	118	228	22	1111	3356
1951	204	501	1033	148	585	2471	237	55	25	161	140	156	144	236	54	1208	3679
1952	204	519	1064	149	569	2505	279	60	38	193	152	145	148	280	62	1357	3862
1953	226	523	1007	167	568	2491	284	45	37	235	179	215	195	341	57	1588	4079
1954	247	527	1018	160	559	2511	312	82	34	225	202	223	159	334	81	1652	4163
1955	243	507	1010	179	650	2589	327	103	41	232	209	166	183	315	74	1650	4239
1956	228	485	980	156	577	2426	297	111	44	202	178	158	153	233	124	1500	3926
1957	256	462	1042	185	590	2535	275	97	26	242	237	191	181	233	152	1634	4169
1958	238	504	959	199	658	2558	255	78	36	236	231	157	202	228	162	1585	4143
1959	301	523	1077	235	710	2846	296	95	32	275	208	164	168	220	169	1627	4473
1950-59	2324	4972	10240	1708	5933	25177	2805	778	333	2117	1861	1762	1651	2648	957	14912	40089
1960	290	574	1105	250	825	3044	346	84	39	196	272	196	179	276	188	1776	4820
1961	362	602	1139	258	1006	3367	353	99	44	228	285	188	181	261	163	1802	5169
1960-61	652	1176	2244	508	1831	6411	699	183	83	424	557	384	360	537	351	3578	9989
TOTAL, 1920-1961	4942	9618	23697	3743	10209	52209	5122	1775	767	4135	4134	4356	3211	6127	2202	31829	84038

Table 3

DOCTORATE PRODUCTION BY YEAR AND DECADE, 1920-1961, SOCIAL SCIENCES, ARTS, AND PROFESSIONS

Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, Misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professions	Business Administration	Religion-Theology	Misc. Professions	TOTAL ARTS-PROFESSIONS	Education	TOTAL SOC. SCI.-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
35	4	13	22	22	12	3	111	23	44	18	11	1	11	6	114	48	273	560
28	3	11	38	38	24	7	149	30	42	23	18	1	8	25	147	32	328	660
34	1	14	33	56	17	3	158	34	45	24	22		19	13	157	59	374	780
66	5	12	40	61	22	8	214	44	48	39	29	1	18	26	205	68	487	1062
51	4	17	50	60	29	5	216	57	65	28	19	1	28	23	221	102	539	1124
71	5	26	64	63	28	14	271	55	57	36	25	2	26	27	228	128	627	1203
73	6	22	81	71	33	13	299	71	55	44	31	6	29	29	265	161	725	1438
77	4	27	91	88	46	17	350	63	63	47	43	7	39	42	304	170	824	1538
85	6	20	85	92	51	11	350	69	68	44	45	12	35	30	303	169	822	1617
123	15	45	103	107	37	25	455	69	93	59	67	12	43	29	372	209	1036	1907
643	53	207	607	658	299	106	2573	515	580	362	310	43	256	250	2316	1146	6035	11889
101	6	39	108	127	33	27	441	96	95	40	62	17	31	26	367	265	1073	2058
120	10	44	119	116	56	17	482	108	102	69	61	14	42	51	447	300	1229	2329
107	9	51	125	122	58	20	492	128	136	60	59	15	62	44	504	307	1303	2397
92	22	39	108	148	67	27	503	113	139	60	47	16	45	40	460	260	1223	2452
129	17	40	113	148	65	27	539	136	166	51	31	19	45	38	486	280	1305	2692
116	20	36	88	156	58	27	501	136	171	45	50	25	61	46	534	246	1281	2582
115	30	37	101	136	54	11	484	144	187	55	62	27	35	42	552	354	1390	2749
114	24	53	109	145	64	10	519	160	169	43	34	15	42	24	487	357	1363	2749
120	14	48	125	160	56	10	533	159	172	43	38	16	45	22	495	361	1389	2731
117	24	60	109	169	57	13	549	163	160	56	36	28	44	23	510	367	1426	2847
1131	176	447	1105	1427	568	189	5043	1343	1497	522	480	192	452	356	4842	3097	12982	25586
127	28	54	119	164	80	23	595	172	179	51	41	22	41	27	533	464	1592	3245
119	31	74	161	185	72	15	657	191	181	54	67	24	64	18	599	477	1733	3566
127	24	63	138	167	70	14	603	177	151	45	70	25	91	29	588	490	1681	3386
90	17	47	82	120	48	11	415	125	113	30	47	20	70	15	420	397	1232	2564
67	10	33	61	59	36	14	280	72	69	34	29	17	71	16	308	316	904	1939
59	9	30	58	69	26	4	255	73	70	26	33	12	80	15	309	293	857	1629
84	29	46	84	117	40	9	409	113	71	26	40	14	53	12	329	350	1088	1988
122	24	76	137	168	61	18	606	165	119	40	63	18	81	16	502	447	1555	2949
179	16	69	146	146	109	19	684	166	134	52	101	25	80	29	587	662	1933	3893
275	21	99	190	224	145	38	992	179	157	58	86	39	101	30	650	836	2478	5396
1249	209	591	1176	1419	687	165	5496	1433	1244	416	577	216	732	207	4825	4732	15053	30555
356	43	130	253	270	159	40	1251	237	211	89	128	55	115	45	880	1030	3161	6517
490	48	141	302	339	165	54	1539	297	200	87	173	63	134	51	1005	1109	3653	7332
586	39	143	312	297	156	37	1570	263	179	86	200	83	115	47	973	1305	3848	7710
656	34	183	312	350	167	58	1760	333	202	110	227	85	100	57	1114	1416	4290	8369
665	53	198	354	367	186	50	1873	345	215	86	270	89	114	55	1174	1506	4553	8716
733	55	188	374	333	214	51	1948	328	216	98	236	96	110	57	1141	1571	4660	8899
627	57	170	314	264	248	89	1769	341	218	78	231	119	97	60	1144	1634	4547	8473
723	65	117	304	339	202	74	1824	368	199	92	263	117	123	70	1232	1375	4431	8600
780	73	174	322	314	226	96	1985	309	207	103	276	122	131	70	1218	1494	4697	8840
809	67	183	338	351	230	85	2063	344	230	115	274	141	134	54	1292	1530	4885	9358
6425	534	1627	3185	3224	1953	634	17582	3165	2077	944	2278	970	1173	566	11173	13970	42725	82814
762	75	156	375	365	251	104	2088	367	206	132	399	134	149	83	1470	1624	5182	10002
870	59	183	434	362	264	98	2270	444	233	148	355	167	130	91	1568	1794	5632	10801
1632	134	339	809	727	515	202	4358	811	439	280	754	301	279	174	3038	3418	10814	20803
11080	1106	3211	6882	7455	4022	1296	35052	7267	5837	2524	4399	1722	2892	1553	26194	26363	87609	171647

Field Sub-divisions

The 29 fields included in Table 2 are compiled from a much larger group of fields more specifically designated in Table 4. Careful distinctions between these fine field groupings are difficult to make, however, on the basis of graduation announcements or even thesis titles. These were the only possible sources for the doctorates of years prior to 1957. Beginning with that year, however, a new data-collection system has been in use, in which the graduate himself designates his field of specialization from a specialties list provided by the Office of Scientific Personnel. The fields the student designates are, in the vast majority of cases, the fields finally coded, although each case is scrutinized to insure uniformity and to eliminate clerical errors. It is these fields, largely self-coded, which are given below. It should be noted that this table, prepared just prior to going to press, contains data for 1962, which is not shown in Table 3, prepared from the magnetic tape record. Some other precautions are needed in interpreting these data, as indicated in the footnotes to the table. Some field-code changes have been introduced, requiring a re-coding of certain fields, notably geo-sciences and nuclear physics. For these reasons, and because the various fields are not viewed with complete uniformity by all universities, the interpretation of the data of Table 4 must be undertaken with caution. Those acquainted with particular fields may, however, derive a considerable amount of useful information from this table.

Table 4

FIELDS OF DOCTORATE SPECIALIZATION, 1957-1962

	1957	1958	1959	1960	1961	1962	57-62
Algebra	30	25	30	32	38	57	212
Analysis	65	70	76	78	92	108	489
Geometry	13	4	11	11	18	19	76
Logic	4	4	7	3	7	17	42
Number Theory	4	7	8	12	14	23	68
Math Stat, Probability	33	37	57	58	69	66	320
Topology	22	16	26	24	25	43	156
Topo. Algebraic Struct.	23	17	21	18	12	12	103
Comput. Theory & Practice	--	--	--	8	7	9	24A
Applied Mathematics	38	36	42	30	58	43	247
Other Math Fields	7	4	9	4	9	2	35
Mathematics, General	17	18	14	12	13	11	85
MATHEMATICS, TOTAL	256	238	301	290	362	410	1857
Astronomy	9	20	22	10	19	30	110
Atomic & Molec. Physics	58	61	59	56	65	84	383
Electricity & Magnetism	13	7	7	10	19	26	82
Mechanics	6	1	4	1	4	6	22
Acoustics	6	16	10	8	9	9	58
Fluids	--	--	1	7	25	26	59
Optics	2	3	9	6	7	7	34
Thermal Phenomena	--	--	--	3	2	5	10A
Elementary Particles	45	47	49	50	73	132	396
Nuclear Physics	4	10	--	2	2	--	18B
Nuclear Structure	101	101	111	125	117	159	714
Solid State	91	106	121	142	123	184	767
Theoretical Physics	64	79	90	107	109	30	479
Other Physics Fields	37	31	30	39	21	35	193
Physics, General	26	22	10	8	7	32	105
PHYSICS & ASTRONOMY	462	504	523	574	602	765	3430
Analytical Chemistry	72	67	66	66	83	84	438
Inorganic	61	62	78	87	106	105	499
Organic	457	392	484	506	474	498	2811
Nuclear	--	--	--	25	27	27	79A
Physical	301	275	317	300	320	360	1873
Theoretical	--	--	--	14	20	22	56A
Agric. & Food	29	28	36	37	39	31	200
Pharmaceutical	37	36	25	40	35	37	210
Other Chemistry Fields	33	25	38	10	22	7	135
Chemistry, General	52	74	33	20	13	11	203
CHEMISTRY, TOTAL	1042	959	1077	1105	1139	1182	6504

	1957	1958	1959	1960	1961	1962	57-62
Mineral.,Petr.& Geo-Chem.	43	49	86	62	88	72	400C
Stratig.-Sedimentation	45	55	68	72	59	40	339C
Paleontology	11	18	9	23	16	38	115C
Structural Geology	9	9	8	9	11	14	60C
Solid Earth Geophysics	19	17	19	21	38	14	128
Geomorphology, Glacial G.	17	5	11	13	6	9	61C
Hydrology	--	1	--	3	2	3	9
Oceanography	11	12	8	6	5	12	54
Meteorology	18	15	12	24	13	18	100
Applied Geology	12	15	14	17	20	21	99
Other Geology Fields	--	2	--	--	--	7	9
Geology, General	--	1	--	--	--	4	5
GEO-SCIENCES, TOTAL	185	199	235	250	258	252	1379
Aeronautical Engin.	31	31	28	27	39	55	211
Agricultural	15	13	20	22	13	23	106
Civil	41	52	55	71	103	122	444
Chemical	145	137	157	178	201	238	1056
Ceramic	4	14	10	16	24	18	86
Electrical	117	129	127	171	222	253	1019
Electronics	19	29	40	40	39	76	243
Industrial	14	7	12	18	21	22	94
Engineering Mechanics	26	52	49	55	68	111	361
Engineering Physics	9	17	26	30	24	49	155
Mechanical	68	76	87	93	106	160	590
Metallurgy	78	76	69	78	95	109	505
Sanitary	9	9	13	11	25	18	85
Textile	--	--	1	--	--	--	1
Other Engin. Fields	12	12	15	12	25	23	99
Engineering, General	2	4	1	3	1	4	15
ENGINEERING, TOTAL	590	658	710	825	1006	1281	5070
PHYSICAL SCIENCES, TOTAL	2535	2558	2846	3044	3367	3890	18240
Agronomy	100	101	111	127	148	148	735
Animal Husbandry	64	60	64	121	99	119	527
Fish & Wildlife	15	20	23	17	17	18	110
Forestry	27	16	31	24	34	38	170
Horticulture	40	43	51	41	46	62	283
Other Agric. Fields	24	9	16	13	9	27	98
Agriculture, General	5	6	--	3	--	1	15
AGRIC. SCIENCES, TOTAL	275	255	296	346	353	413	1938

	1957	1958	1959	1960	1961	1962	57-62
Medicine & Surgery	19	14	6	11	12	7	69
Pharmacy	29	33	28	22	25	38	175
Public Health	13	13	25	26	24	23	124
Veterinary Medicine	16	7	16	11	20	20	90
Hospital Administration	--	2	1	3	3	2	11
Optometry & Ophthalmology	--	--	2	1	3	2	8
Dentistry	1	3	3	1	2	1	11
Other Med. Sci. Fields	19	6	14	9	10	16	74
MEDICAL SCIENCES, TOTAL	97	78	95	84	99	109	562
Anatomy	26	36	32	39	44	50	227
Cytology	--	--	--	--	--	22	22D
Embryology	--	--	--	--	--	11	11D
Physiology	142	122	143	132	158	158	855
Pathology	11	11	13	19	17	22	93
Nutrition	42	54	72	--	--	--	168E
Pharmacology	47	49	47	44	52	78	317
Biochemistry	237	231	208	273	286	289	1524
Biophysics	37	21	25	26	26	34	169
Biometrics	4	2	4	14	5	10	39
Botany	120	88	99	116	110	108	641
Phytopathology	71	69	65	80	78	94	457
Ecology	19	31	21	40	22	45	178
Hydrobiology	6	6	7	5	4	10	38
Microbiology	181	202	168	179	181	198	1109
Genetics	53	66	82	79	76	76	432
Zoology	150	136	149	177	169	194	975
Entomology	83	92	71	99	92	106	543
Other Bio-Sci. Fields	18	16	11	12	22	17	96
Bio-Sciences, General	15	20	19	12	8	7	81
BIO-SCIENCES, TOTAL	1262	1252	1236	1346	1350	1529	7975
AGRIC.+ MED.+ BIO, TOTAL	1634	1585	1627	1776	1802	2051	10475
NATURAL SCIENCES, TOTAL	4169	4143	4473	4820	5169	5941	28715
Clinical	237	276	266	269	296	312	1656
Counseling & Guidance	44	52	58	62	76	51	343
Developmental & Gerontol.	30	17	27	13	22	29	138
Educational	80	82	63	68	79	42	414
School Psychology	--	--	--	12	12	10	34A
Exper.,Compar.,& Physiol.	147	152	208	167	202	236	1112
Human Engineering	6	6	6	4	4	4	30
Industrial & Personnel	27	28	43	31	31	38	198
Personality	--	--	--	13	22	31	66A
Psychometrics	22	23	23	14	19	22	123
Social	68	74	69	75	79	79	444
Other Psychology Fields	13	8	18	6	5	4	54
Psychology, General	49	62	28	28	23	13	203
PSYCHOLOGY, TOTAL	723	780	809	762	870	871	4815

	1957	1958	1959	1960	1961	1962	57-62
Anthropology	57	61	59	62	53	81	373
Archeology	8	12	8	13	6	5	52
Sociology	117	174	183	156	183	195	1008
Economics	298	312	333	364	426	385	2118
Econometrics & Statistics	6	10	5	11	8	22	62
History	339	314	351	365	362	389	2120
Geography	44	63	48	67	43	63	328
Area Studies	3	--	2	--	1	4	10
Pol. Sci., Publ. Admin.	157	185	190	201	223	216	1172
International Relations	45	41	40	50	41	50	267
Social Work	19	20	24	24	34	29	150
Other Social Sci. Fields	5	11	5	7	18	11	57
Social Sciences, General	3	2	6	6	2	4	23
SOCIAL SCIENCES, TOTAL	1101	1205	1254	1326	1400	1454	7740
Home Economics	12	17	15	25	33	28	130
Journalism	12	9	10	14	14	9	68
Law, Jurisprudence	28	30	22	22	29	35	166
Library & Archival Sci.	16	13	6	20	15	10	80
Architecture	2	1	1	2	--	--	6F
MISC. PROFESSIONS, TOTAL	70	70	54	83	91	82	450
Arts, Fine & Applied	48	53	38	60	48	35	282
English Language & Lit.	368	309	344	367	444	446	2278
Speech & Dramatic Arts	104	109	135	155	144	210	857
Foreign Lang. & Lit. Mod.	158	170	188	168	184	207	1075
Foreign Lang. & Lit. Cla.	41	37	42	38	49	64	271
Linguistics	18	41	28	48	48	45	228
Music	85	65	69	112	97	87	515
Philosophy	92	103	115	132	148	114	704
Business Admin.	117	122	141	134	167	213	894
Religion & Theology	123	131	134	149	130	155	822
Other Arts & Hum. Fields	1	3	2	10	8	6	30
Arts & Human., General	4	4	1	5	2	2	18
Science, General or Other	3	1	1	7	8	7	27
ARTS, TOTAL	1162	1148	1238	1385	1477	1591	8001
TOTAL ARTS & PROFESSIONS	1232	1218	1292	1468	1568	1673	8451
Elementary Education	--	--	--	139	128	--	---G
Secondary Education	--	--	--	186	261	--	---G
Admin. & Supervision	--	--	--	483	564	--	---G
Agriculture	--	--	--	39	32	--	---G
Phys.Ed., Health & Rec.	--	--	--	126	103	--	---G
Sciences Education	--	--	--	76	103	--	---G
Education, General	1375	1494	1530	575	603	--	---G
EDUCATION, TOTAL	1375	1494	1530	1624	1794	1949	9766
TOTAL SOCIAL SCIENCES, ARTS & PROFESSIONS*	4431	4697	4885	5180	5632	5947	30772
GRAND TOTAL	8600	8840	9358	10000	10801	11888	59487

A These fields were added in February 1960 because of a change in coding. They are probably understated because earlier forms were still used after that.

B Recoded as Elementary Particles and Nuclear Structure. It was not possible to recode 18.

C Geology and Earth Sciences, general and other, were recoded by the Division of Earth Sciences of the National Academy of Sciences in order to obtain better sub-field allocation.

D Cytology and Embryology were added in 1962.

E Nutrition as separate field eliminated in 1960.

F Architecture as separate field eliminated in 1961.

G Added to coding system in January 1960; 1962 break-out not available at time of publication.

* Including Psychology and Education

Table 5

STATE AND REGIONAL PERCENTAGES OF DOCTORATE PRODUCTION BY FIVE-YEAR PERIODS, 1920-1960

State or Region	1920-24	1925-29	1930-34	1935-39	1940-44	1945-49	1950-54	1955-59	1960-61	1920-61
Maine	--	--	--	--	--	--	--	--	.01	.002
New Hampshire	--	--	--	--	--	--	--	.03	.09	.02
Vermont	--	--	--	.01	.03	.02	.03	.02	.02	.02
Massachusetts	11.71	9.07	9.18	8.79	8.22	9.44	8.04	7.30	7.53	8.21
Rhode Island	.50	.47	.59	.64	.61	.69	.48	.44	.49	.52
Connecticut	5.45	4.92	4.79	4.58	3.69	3.19	2.64	2.67	2.61	3.26
New England	17.65	14.46	14.56	14.03	12.54	13.33	11.18	10.47	10.75	12.03
New York	20.98	20.56	19.50	18.58	18.51	18.18	17.07	15.67	14.58	17.17
New Jersey	2.75	2.06	2.11	2.45	2.14	2.30	1.91	2.15	2.22	2.15
Pennsylvania	4.47	4.61	5.86	5.95	6.20	5.68	5.77	5.81	6.04	5.78
Middle Atlantic	28.19	27.24	27.47	26.99	26.84	26.16	24.75	23.62	22.85	25.10
Ohio	2.17	3.52	4.79	4.56	4.72	5.08	4.48	3.82	3.93	4.25
Indiana	.84	.95	1.11	1.55	2.57	3.24	4.32	4.59	4.84	3.52
Illinois	16.10	14.09	11.38	11.04	11.14	11.18	9.56	8.39	8.00	9.96
Michigan	2.70	3.62	4.16	3.93	4.06	3.05	4.49	5.18	5.62	4.48
Wisconsin	6.50	6.15	5.47	5.12	5.52	4.89	4.50	4.15	3.91	4.70
E. N. Central	28.30	28.33	26.91	26.20	28.01	27.44	27.35	26.12	26.30	26.92
Minnesota	2.51	3.30	2.93	3.10	3.57	3.13	2.64	2.67	2.29	2.81
Iowa	3.46	4.66	4.76	5.07	4.50	4.02	3.76	3.01	2.98	3.77
Missouri	.88	.87	1.48	1.74	1.54	1.49	2.10	1.75	1.74	1.70
North Dakota	--	.03	.13	.12	.01	.05	.09	.07	.09	.07
South Dakota	--	--	--	--	--	--	--	.01	.07	.01
Nebraska	.41	.34	.58	.66	.74	.54	.58	.63	.69	.61
Kansas	.24	.48	.53	.44	.40	.37	.77	1.01	1.02	.72
W. N. Central	7.50	9.67	10.40	11.13	10.77	9.60	9.93	9.15	8.88	9.70
Delaware	--	--	--	--	--	.11	.25	.22	.19	.14
Maryland	6.76	5.53	4.45	3.26	2.54	2.08	1.85	1.96	1.88	2.54
Washington, D. C.	3.37	3.12	2.66	2.35	3.16	2.44	1.92	1.87	1.44	2.18
Virginia	.50	.62	.79	.90	.76	.78	.57	.60	.70	.67
West Virginia	--	--	.11	.15	.11	.06	.09	.11	.05	.09
North Carolina	.31	.86	1.46	1.98	1.90	2.05	2.01	2.14	2.12	1.91
South Carolina	--	.13	.04	.01	--	.01	.02	.07	.10	.04
Georgia	--	--	--	--	.03	.03	.21	.35	.46	.20
Florida	--	--	.03	.18	.14	.13	.67	1.30	1.57	.71
South Atlantic	10.94	10.26	9.53	8.83	8.63	7.68	7.58	8.61	8.49	8.49
Kentucky	--	--	.14	.19	.16	.20	.36	.38	.41	.29
Tennessee	.48	.86	1.14	1.07	.97	.62	1.10	1.23	1.16	1.08
Alabama	--	--	--	--	--	--	.05	.28	.46	.14
Mississippi	--	--	--	--	--	--	.03	.07	.09	.04
E. S. Central	.48	.86	1.28	1.26	1.14	.83	1.54	1.96	2.12	1.54
Arkansas	--	--	--	--	--	--	.05	.16	.22	.08
Louisiana	.02	.09	.06	.36	.57	.49	.75	.87	1.00	.64
Oklahoma	--	.01	.14	.24	.18	.25	.60	.89	1.07	.56
Texas	.19	.49	1.03	1.27	1.52	1.72	2.19	2.94	2.61	2.05
W. S. Central	.22	.60	1.23	1.88	2.27	2.45	3.58	4.85	4.89	3.34
Montana	--	--	--	--	--	--	--	.04	.09	.02
Wyoming	--	--	--	--	--	.06	.12	.14	.14	.09
Colorado	.19	.26	.40	.63	.77	.90	1.45	1.56	1.79	1.19
New Mexico	--	--	--	--	--	.04	.11	.15	.18	.09
Arizona	.05	.01	.05	.06	.05	.10	.03	.15	.31	.11
Utah	--	--	--	--	--	.13	.50	.65	.67	.37
Mountain	.24	.27	.45	.69	.82	1.22	2.21	2.69	3.17	1.86
Washington	.22	.71	.83	1.19	.93	.93	1.23	1.73	1.61	1.27
Oregon	--	.04	.12	.21	.25	.45	.71	.96	.98	.61
California	6.26	7.57	7.13	7.60	7.79	9.90	9.93	9.74	9.90	9.10
Alaska	--	--	--	--	--	--	--	.01	.02	.01
Hawaii	--	--	.01	.01	--	--	.01	.02	.05	.02
Pacific	6.47	8.32	8.08	9.01	8.97	11.27	11.88	12.45	12.56	11.02

Regional Spread of Doctorate Production

Since 1920, PhD production has spread from an original group of 26 states and the District of Columbia to 48 states--all but Idaho and Nevada. The percentage change, by five-year periods in the contribution of each state and region to the U.S. total is shown in Table 5. The final column gives the percentage contribution of each state and region to the 42-year total. The 42-year total contribution of each state and region, divided into 29 fields and summarized by field groups, is shown in Table 6.

The relative contribution of each region in each five-year period is shown graphically in Figure 7. It is apparent that although the total contribution of the "new" states (those who began graduating PhD's since 1925) is not yet large, it is increasing at a rather rapid rate. The relative contribution of the northeast (New England, New York, New Jersey) has declined from 41 percent to about 27 percent, while the south and west, which in 1920 contributed 11 percent and seven percent respectively, now each contribute 16 percent of the total. The north central region (east and west combined) remains relatively constant at somewhat over 35 percent of the total.

Figure 7

RELATIVE DOCTORATE PRODUCTION, BY REGION, 1920-1961

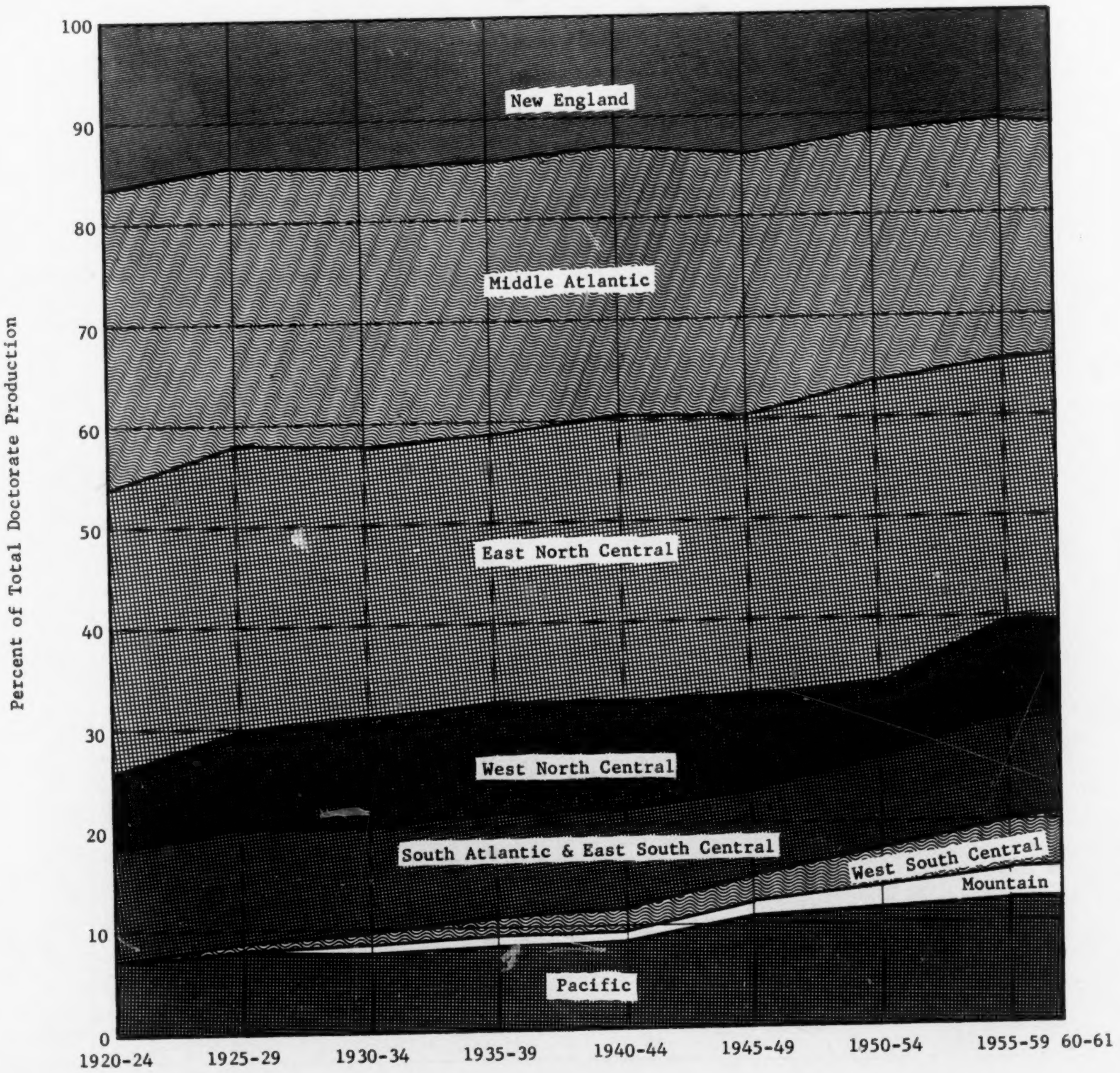


Table 6

DOCTORATE PRODUCTION, 1920-1961 TOTAL, BY STATES AND REGIONS: PHYSICAL AND BIOLOGICAL SCIENCES

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat., Cytol., Embryol.	Physiology and Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology and Entomology	Bio-Sciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
MAINE	11			3			3											3
NEW HAMPSHIRE	12			21			21	2				1	6	1	2		12	33
VERMONT	13											1					1	1
MASSACHUSETTS	14	449	1145	1684	474	1476	5228	32	100	8	221	213	148	68	225	232	1247	6475
RHODE ISLAND	15	158	109	200	1	9	477		1	3	34	7	4	16	27	32	124	601
CONNECTICUT	16	105	347	642	149	267	1510	93	99	17	91	88	100	129	163	46	826	2336
TOTAL NEW ENGLAND		712	1601	2550	624	1752	7239	127	200	28	346	310	258	214	417	310	2210	9449
NEW YORK	21	538	1213	3034	440	1230	6455	750	122	138	598	484	483	289	856	328	4048	10503
NEW JERSEY	22	259	317	585	202	166	1529	216	13		105	71	53	108	155	36	757	2286
PENNSYLVANIA	23	267	593	1533	128	822	3343	161	181	19	152	179	139	258	204	57	1350	4693
TOTAL MIDDLE ATLANTIC		1064	2123	5152	770	2218	11327	1127	316	157	855	734	675	655	1215	421	6155	17482
OHIO	31	151	379	1439	72	516	2557	303	78	27	133	184	178	154	364	32	1453	4010
INDIANA	32	165	337	1335	44	533	2414	187	84	8	148	129	124	94	156	69	999	3413
ILLINOIS	33	640	909	2845	437	985	5816	343	99	123	597	316	429	287	559	109	2862	8678
MICHIGAN	34	260	413	843	135	760	2411	476	67	59	150	150	259	249	402	35	1847	4258
WISCONSIN	35	158	299	1223	186	395	2261	503	117	23	204	552	541	256	359	184	2739	5000
TOTAL EAST N CENTRAL		1374	2337	7685	874	3189	15459	1812	445	240	1232	1331	1531	1040	1840	429	9900	25359
MINNESOTA	41	92	124	532	104	255	1107	332	248	69	154	305	264	102	193	176	1843	2950
IOWA	42	152	226	1039	98	359	1874	382	41	28	258	195	248	199	333	106	1790	3664
MISSOURI	43	88	218	319	71	119	815	181	5	56	71	99	146	41	85	36	720	1535
NORTH DAKOTA	44			1		2	3			1	1	4					6	9
SOUTH DAKOTA	45							6				1	2	1			10	10
NEBRASKA	46	13	15	170	12		210	74	4	5	13	8	74	7	36	7	228	438
KANSAS	47	27	52	308	33	14	434	31	2	22	38	23	31	81	161	14	403	837
TOTAL WEST N CENTRAL		372	635	2369	318	749	4443	1006	300	181	535	635	765	431	808	339	5000	9443
DELAWARE	51			174		65	239					3	1	2	2	1	9	248
MARYLAND	52	93	331	716	133	292	1565	174	296	13	125	105	93	202	250	97	1355	2920
D.C.	53	78	129	282	19	16	524	4	9	13	90	121	38	62	75	23	435	959
VIRGINIA	54	68	167	232	7	46	520	9	1	2	15	8	32	5	45	29	146	666
WEST VIRGINIA	55	3	1	49	3	24	80	8				6	29	1	4	2	50	130
NORTH CAROLINA	56	179	183	419	25	36	842	166	36	9	49	61	152	30	113	37	653	1495
SOUTH CAROLINA	57			16			16	2		4	10	1	1		1	2	21	37
GEORGIA	58	14	10	78		55	157	2		6	6	9	2	7	12	18	62	219
FLORIDA	59	41	23	213	7	39	323	58	32		59	23	19	1	51	18	261	584
TOTAL SOUTH ATLANTIC		476	844	2179	194	573	4266	423	374	47	354	337	367	310	553	227	2992	7258
KENTUCKY	61	32	14	90		10	146	8	1		1	3		10		1	24	170
TENNESSEE	62	48	82	190	3	22	345	2	1	12	41	31	18	30	29	13	177	522
ALABAMA	63	16	12	25			53	6		2	11	8	5	1	17	1	51	104
MISSISSIPPI	64			2		1	3	12	1	1	3	1		1			19	22
TOTAL EAST S CENTRAL		96	108	307	3	33	547	28	3	15	56	43	23	42	46	15	271	818
ARKANSAS	71			27			27				2	4					6	33
LOUISIANA	72	43	32	156	43	25	299	46	17	14	31	25	71	33	53	1	291	590
OKLAHOMA	73	33	39	89	21	45	227	39	5	4	36	23	16	10	76	9	218	445
TEXAS	74	127	267	496	75	200	1165	78	9	11	79	88	51	71	156	54	597	1762
TOTAL WEST S CENTRAL		203	338	768	139	270	1718	163	31	29	148	140	138	114	285	64	1112	2830
MONTANA	81			11		11	22					1		1	4		6	28
WYOMING	83			10	12		22	11			2		3			3	19	41
COLORADO	84	23	48	211	83	68	433	3	22	8	27	33	9	30	27	10	169	602
NEW MEXICO	85	2	12	37	1	2	54				6			1	2	1	10	64
ARIZONA	86			13	46	4	63	8				10	12	1	5	2	38	101
UTAH	87	6	40	102	39	96	283	26	6	8	20	27	7	18	24	11	147	430
TOTAL MOUNTAIN		31	100	384	181	181	877	48	28	16	55	71	31	51	62	27	389	1266
WASHINGTON	91	54	109	388	71	56	678	156	36	1	73	41	87	64	77	7	542	1220
OREGON	92	48	35	153	2	16	254	75		4	44	57	61	21	57	30	349	603
CALIFORNIA	93	512	1386	1754	561	1172	5385	156	42	49	437	435	418	269	756	329	2891	8276
ALASKA	94		2		6		8											8
HAWAII	95			8			8	1					2		11	4	18	26
TOTAL PACIFIC		614	1532	2303	640	1244	6333	388	78	54	554	533	568	354	901	370	3800	10133
GRAND TOTAL		4942	9618	23697	3743	10209	52209	5122	1775	767	4135	4134	4356	3211	6127	2202	31829	84038

Table 6

DOCTORATE PRODUCTION, 1920-1961 TOTAL, BY STATES AND REGIONS: SOCIAL SCIENCES, ARTS, AND PROFESSIONS

Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, Misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professions	Business Administration	Religion-Theology	Misc. Professions	TOTAL ARTS-PROFESSIONS	Education	TOTAL SOC. SCI.-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
																		3
																		33
									30						30		30	31
592	175	199	969	946	585	203	3669	597	448	426	614	230	386	260	2961	983	7613	14088
55	1	4	20	37	13		130	66	43	31	5		15		160	4	294	895
295	85	121	122	270	152	6	1051	558	373	166	122	1	324	198	1742	468	3261	5597
942	261	324	1111	1253	750	209	4850	1221	894	623	741	231	725	458	4893	1455	11198	20647
2019	237	579	1074	1166	611	207	5893	1134	1069	668	664	378	269	449	4631	8455	18979	29482
121	11	13	139	107	172	13	576	220	241	70	46		105	6	688	138	1402	3688
667	73	217	414	399	150	57	1977	490	438	107	151	27	207	28	1448	1800	5225	9918
2807	321	809	1627	1672	933	277	8446	1844	1748	845	861	405	581	483	6767	10393	25606	43088
739	20	138	216	194	66	48	1421	240	182	41	244	128	26	33	894	970	3285	7295
556	20	47	211	133	79	12	1058	122	56	59	172	118	56	14	597	975	2630	6043
1053	168	495	730	705	545	230	3926	726	703	174	573	281	605	191	3253	1238	8417	17095
601	36	154	207	218	116	96	1428	301	195	78	259	83	2	74	992	1020	3440	7698
143	10	179	576	409	134	70	1521	342	323	42	249	45	1	46	1048	500	3069	8069
3092	254	1013	1940	1659	940	456	9354	1731	1459	394	1497	655	690	358	6784	4703	20841	46200
503	2	99	230	172	111	32	1149	146	76	21	90	20		18	371	361	1881	4831
537	2	82	293	160	124	20	1218	244	113	34	408	101	21	38	959	623	2800	6464
126	3	80	87	140	37	16	489	87	71	58	23	18	1	31	289	613	1391	2926
25		3		3	2	1	34	1				1			2	79	115	124
			3				3									8	11	21
121	2	21	28	58	12	32	274	16	6	20		9			51	280	605	1043
113		8	17	18	7	2	165	27	17		2			2	48	194	407	1244
1425	9	293	658	551	293	103	3332	521	283	133	523	149	22	89	1720	2158	7210	16653
																		248
191	68	12	111	136	134	35	687	161	262	33	11	3	34	4	508	244	1439	4359
200	10	140	194	321	273	18	1156	112	224	226	22	13	587	84	1268	355	2779	3738
33		13	107	68	20		241	90	39	34	2			2	167	77	485	1151
				14			14	1							1	6	21	151
190	4	162	194	266	104	11	931	279	198	35	40	8	89	2	651	210	1792	3287
1				12			13	10							10	16	39	76
10		4		22	5	1	42	16		8	4	1	4		33	47	122	341
113		20	28	28	13	13	215	72	7		65	5	1	16	166	262	643	1227
738	82	351	634	867	549	78	3299	741	730	336	144	30	715	108	2804	1217	7320	14578
94		13	23	31	14		175	19	8		1		1		29	118	322	492
190		27	30	105	3	8	363	176	22	5	15		47	1	266	698	1327	1849
2			3	11	6		22	2				27			29	86	137	241
				1			1	1							1	37	39	61
286		40	56	148	23	8	561	198	30	5	16	27	48	1	325	939	1825	2643
			9	1			10	13				2			15	77	102	135
76		50	34	44	3	20	227	66	34	4	69	27		1	201	87	515	1105
59			22	45	1		127	23			7				30	359	516	961
293		21	118	222	52	2	708	179	81	12	28	98	1	18	417	637	1762	3524
428		71	183	312	56	22	1072	281	115	16	104	127	1	19	663	1160	2895	5725
																9	9	37
4							4									103	107	148
213		10	36	54	11		324	81	22	3	123		1	2	232	878	1434	2036
	12			28			40	22	17		2				41	6	87	151
8	20						28									54	82	183
61	1	8		6	16	2	94	7	5		25				37	79	210	640
286	33	18	36	88	27	2	490	110	44	3	150		1	2	310	1129	1929	3195
123	13	94	43	55	46	51	425	143	59	17	16	30		11	276	261	962	2182
41	5	10	24	16	7		103	8	8		1			1	18	329	450	1053
911	128	188	570	834	398	90	3119	469	467	152	346	68	109	23	1634	2619	7372	15648
																		8
1							1										1	27
1076	146	292	637	905	451	141	3648	620	534	169	363	98	109	35	1928	3209	8785	18918
11080	1106	3211	6882	7455	4022	1296	35052	7267	5837	2524	4399	1722	2892	1553	26194	26363	87609	171647

Diffusion of Doctorate Production

There has been a considerable concern in recent years about the supposed concentration of the more able students in a relatively small number of high-prestige institutions. The data of this study cannot shed light on the question of the ability, but it does indicate quite unequivocally that in terms of numbers alone doctorate production is being systematically spread wider, with less concentration in the leading schools, and that this process has been going on for at least the last 40 years. The leading institutions of the present, it is to be noted, are not the same as those of previous periods; there has been a general relative increase in output in the state-supported institutions and a relative decrease in the output in the private schools. If the outputs of the leading schools of each five-year period are summed, regardless of which schools are temporarily the leaders, the data of Figure 8, and the bottom portion of Table 7 emerge. It is apparent that the proportion of the total U.S. production of doctorates attributable to the leading five, the leading ten, the leading 15, or the leading 20 schools has been decreasing systematically throughout the period covered in the present survey.

More detailed information is provided in Table 8, which lists the 40 leading institutions (ranked in terms of total doctorate output over the 42-year period) in order of size. For each institution, the output in each five-year period in each of ten fields is given. The fields are mathematics, physics, chemistry, geo-sciences, engineering, bio-sciences, psychology, other social sciences, arts and professions, and education. Summaries of groups of these fields are also provided. In addition to these tables, more detailed information is given in the Appendix, where three detailed tables compress one dimension (locale, time, or discipline) while expanding the others. Appendix 1 gives information by state and region for each decade for each of the ten fields named above. Appendix 2 presents decade-by-decade figures for each institution, for the five major fields only. Appendix 3 gives the output of each school in each of 29 fields, but only for the entire 42-year period.

Figure 8

40-YEAR DECLINE IN RELATIVE PRODUCTIVITY OF THE LEADING DOCTORATE INSTITUTIONS

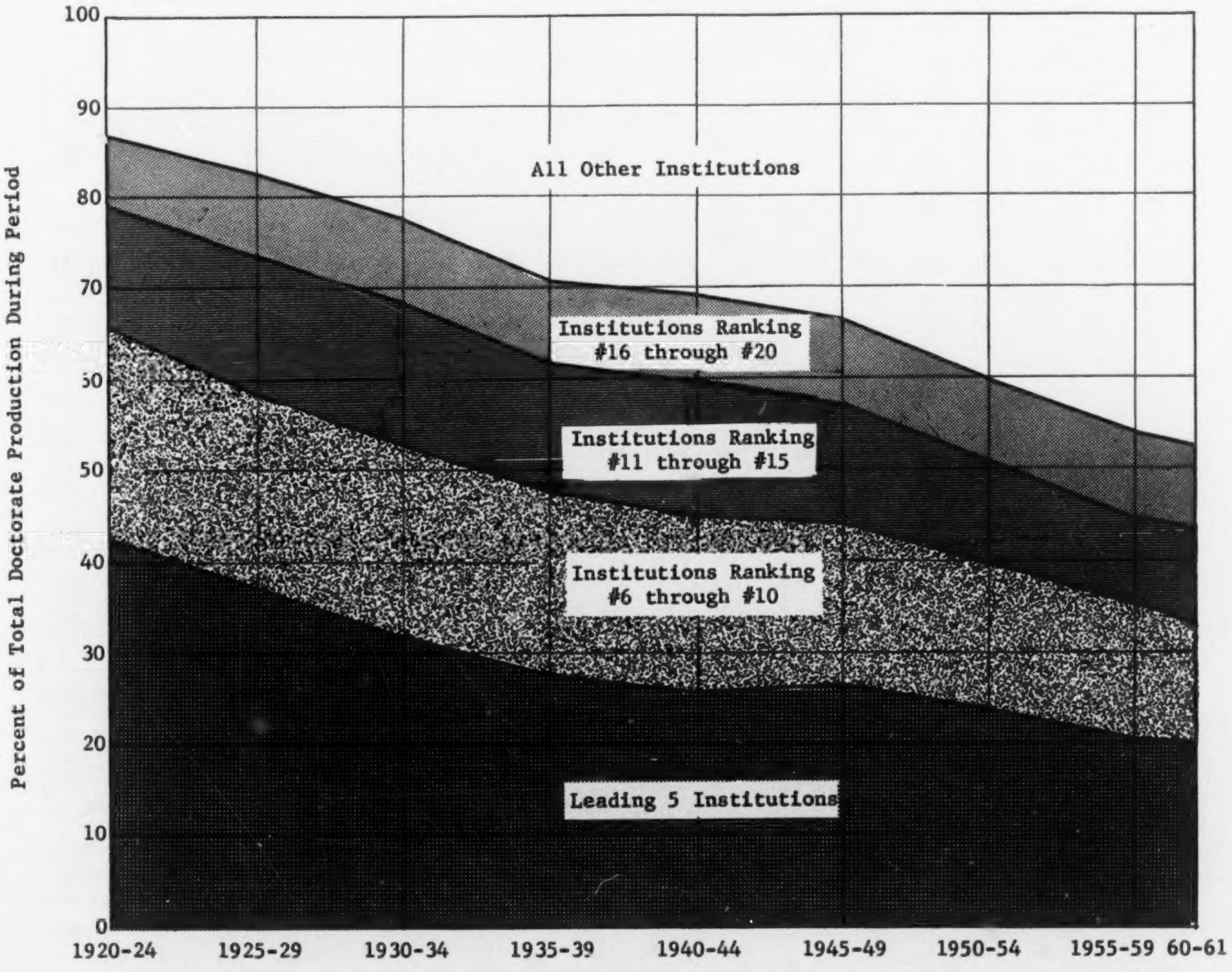


Table 7

LEADING DOCTORATE-PRODUCING INSTITUTIONS FOR EACH FIVE-YEAR PERIOD 1920-61

With Number of Doctorates Granted by Each School During the Period

Rank	1920-24	1925-29	1930-34	1935-39	1940-44	1945-49	1950-54	1955-59	1960-61
1.	Chicago 473	Columbia 797	Columbia 1050	Columbia 1042	Columbia 1187	Columbia 1272	Columbia 2877	Columbia 2736	Columbia 1129
2.	Columbia 449	Chicago 770	Chicago 782	Chicago 757	Chicago 765	Chicago 850	Wisconsin 1706	Wisconsin 1794	Illinois 823
3.	Harvard 338	Harvard 491	Harvard 749	Harvard 702	Wisconsin 732	Harvard 786	Harvard 1656	Illinois 1593	Wisconsin 792
4.	Hopkins 280	Wisconsin 474	Wisconsin 642	Wisconsin 662	Harvard 679	Wisconsin 757	Berkeley 1468	Harvard 1525	Harvard 712
5.	Wisconsin 272	Cornell 410	Cornell 633	Cornell 639	Cornell 604	Cornell 645	Chicago 1410	Berkeley 1455	Berkeley 712
6.	Cornell 258	Hopkins 396	Yale 572	Yale 626	N. Y. U. 594	Ohio St. 613	Illinois 1402	N. Y. U. 1439	N. Y. U. 639
7.	Yale 228	Yale 379	Hopkins 488	N. Y. U. 564	Illinois 565	Berkeley 583	Ohio St. 1311	Michigan 1407	Michigan 638
8.	Berkeley 184	Berkeley 336	Berkeley 477	Illinois 528	Michigan 555	Illinois 557	Michigan 1232	Ohio St. 1233	Ohio St. 533
9.	Illinois 176	Iowa 268	Michigan 466	Berkeley 510	Berkeley 548	Yale 502	N. Y. U. 1174	Minnesota 1181	Cornell 487
10.	Penn. 123	Michigan 262	N. Y. U. 459	Michigan 489	Yale 542	Minnesota 496	Cornell 1173	Chicago 1156	Minnesota 477
11.	Iowa 122	Illinois 255	Ohio St. 458	Iowa 465	Minnesota 524	N. Y. U. 460	Minnesota 1020	Yale 1002	Purdue 471
12.	Michigan 113	Minnesota 254	Illinois 408	Ohio St. 435	Ohio St. 496	Stanford 437	Yale 964	Cornell 986	Yale 456
13.	Minnesota 105	Ohio St. 238	Iowa 395	Minnesota 424	Iowa 409	M. I. T. 437	Stanford 878	Purdue 969	Indiana 437
14.	Princeton 94	Penn. 221	Minnesota 350	Hopkins 350	Catholic 385	Michigan 404	Iowa 855	Stanford 910	Chicago 429
15.	Ohio St. 88	N. Y. U. 183	Penn. 342	Penn. 294	M. I. T. 304	Iowa 378	M. I. T. 814	M. I. T. 852	Stanford 419
16.	Fordham 81	Stanford 174	Stanford 216	M. I. T. 263	N.Western 272	Penn. 312	Purdue 813	Indiana 851	M. I. T. 416
17.	N. Y. U. 80	Fordham 159	Princeton 214	Princeton 249	Pittsburgh 261	N.Western 308	N.Western 688	Texas 788	Mich.St. 410
18.	Catholic 75	Catholic 144	Pittsburgh 202	Catholic 236	Penn. 257	Purdue 295	Indiana 667	Penn. 755	Penn. 383
19.	Stanford 66	Princeton 135	Catholic 194	Stanford 236	Iowa St. 253	Catholic 268	Penn. 649	U.S.Cal. 729	Penn. St. 357
20.	M. I. T. 57	Iowa St. 91	Iowa St. 173	Iowa St. 227	Hopkins 252	Princeton 264	Texas 629	Iowa 714	U.C.L.A. 354
United States Total, All Institutions, for each five-year period:	4186	7703	11,928	13,658	14,700	15,855	38,644	44,170	20,803
Leading five in each period, in total numbers and percentage of U.S. total:	1812 43.28%	2942 38.19%	3856 32.33%	3802 27.84%	3967 26.99%	4310 27.18%	9117 23.59%	9103 20.61%	4168 20.04%
Leading ten in each period:	2781 66.43%	4583 59.49%	6318 52.96%	6519 47.73%	6681 45.45%	7061 44.53%	15,409 39.87%	15,519 35.13%	6942 33.37%
Leading fifteen in each period·	3303 78.90%	5734 74.43%	8271 69.34%	8487 62.13%	8889 60.48%	9177 57.88%	19,940 51.59%	20,238 45.81%	9154 44.00%
Leading twenty in each period:	3662 87.43%	6437 83.56%	9270 77.72%	9698 71.00%	10,184 69.27%	10,624 67.00%	23,386 60.51%	24,066 54.48%	11,074 53.23%

Table 8

DOCTORATE PRODUCTION IN TEN FIELDS BY 40 LEADING SCHOOLS, BY FIVE-YEAR PERIODS

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
COLUMBIA	1920-24	5	8	83	5	9	110	45	155	41	103	61	89	294	449
UNIVERSITY	1925-29	7	17	102	13	20	159	57	216	70	152	98	261	581	797
	1930-34	13	22	117	9	31	192	69	261	68	198	161	362	789	1050
2116	1935-39	12	26	112	28	14	192	77	269	66	141	198	368	773	1042
	1940-44	15	26	119	15	17	192	76	268	65	195	190	469	919	1187
	1945-49	16	22	114	34	25	211	91	302	47	150	197	576	970	1272
	1950-54	33	92	128	60	72	385	143	528	57	366	528	1398	2349	2877
	1955-59	22	90	101	82	105	400	114	514	148	451	424	1199	2222	2736
	1960-61	21	32	37	23	50	163	50	213	70	211	194	441	916	1129
TCTAL,	1920-61	144	335	913	269	343	2004	722	2726	632	1967	2051	5163	9813	12539
UNIVERSITY OF	1920-24	3	9	57	5	2	76	82	158	2	71	37	4	114	272
WISCCNSIN	1925-29	5	17	94	11	10	137	141	278	2	125	45	24	196	474
	1930-34	18	27	131	25	12	213	199	412	10	124	68	28	230	642
3527	1935-39	14	29	99	9	13	164	205	369	8	111	147	27	293	662
	1940-44	20	21	121	6	21	189	271	460	7	126	103	36	272	732
	1945-49	19	29	116	15	28	207	303	510	1	121	70	55	247	757
	1950-54	38	72	207	44	106	467	625	1092	35	280	196	103	614	1706
	1955-59	26	59	160	50	120	415	640	1055	53	305	241	140	739	1794
	1960-61	13	21	76	21	65	196	263	459	25	109	126	73	333	792
TOTAL,	1920-61	156	284	1061	186	377	2064	2729	4793	143	1372	1033	490	3038	7831
HARVARD	1920-24	10	13	29	9		61	39	100		85	124	29	238	338
UNIVERSITY	1925-29	16	11	40	15		82	47	129		93	215	54	362	491
	1930-34	23	37	62	26		148	80	228	10	189	293	29	521	749
1422	1935-39	20	29	62	37	2	150	87	237	17	226	203	19	465	702
	1940-44	24	28	78	16	5	151	85	236	23	188	190	42	443	679
	1945-49	27	58	61	31	53	230	60	290	25	263	167	41	496	786
	1950-54	42	149	110	44	56	401	133	534	71	555	385	111	1122	1656
	1955-59	57	122	100	40	51	370	131	501	61	438	351	174	1024	1525
	1960-61	27	59	48	25	17	176	50	226	41	188	186	71	486	712
TOTAL,	1920-61	246	506	590	243	184	1769	712	2481	248	2225	2114	570	5157	7638
UNIVERSITY OF	1920-24	31	44	66	28		169	95	264	41	58	104	6	209	473
CHICAGO	1925-29	52	52	78	22		204	137	341	82	141	202	4	429	770
	1930-34	49	37	103	16		205	157	362	49	109	238	24	420	782
3387	1935-39	39	35	106	34	1	215	143	358	33	120	228	18	399	757
	1940-44	25	52	83	26		186	159	345	11	171	190	48	420	765
	1945-49	10	54	86	34		184	96	280	45	223	195	107	570	850
	1950-54	50	90	113	47		300	190	490	127	443	213	137	920	1410
	1955-59	57	62	78	39		236	129	365	141	350	211	89	791	1156
	1960-61	20	32	28	17		97	46	143	46	135	70	35	286	429
TOTAL,	1920-61	333	458	741	263	1	1796	1152	2948	575	1750	1651	468	4444	7392
UNIVERSITY OF	1920-24	9	9	64	2	1	85	45	130	2	17	20	7	46	176
ILLINOIS	1925-29	24	13	71	2	4	114	61	175	3	52	17	8	80	255
	1930-34	25	16	121	8	8	178	76	254	6	91	44	13	154	408
3388	1935-39	31	25	165	5	20	246	97	343	13	84	84	4	185	528
	1940-44	25	27	240	9	17	318	105	423	6	49	79	8	142	565
	1945-49	21	20	218	4	52	315	114	429	6	52	45	25	128	557
	1950-54	44	86	303	20	200	653	308	961	59	136	143	103	441	1402
	1955-59	55	80	260	49	205	649	356	1005	73	162	208	145	588	1593
	1960-61	26	37	122	35	142	362	171	533	36	86	92	76	290	823
TOTAL,	1920-61	260	313	1564	134	649	2920	1333	4253	204	729	732	389	2054	6307
UNIV CF CALI-	1920-24	8	18	36	10	2	74	38	112	4	38	12	18	72	184
FORNIA BERK	1925-29	12	30	54	9	4	109	80	189	10	67	35	35	147	336
	1930-34	10	54	50	20	8	142	113	255	14	111	53	44	222	477
9356	1935-39	19	46	57	16	9	147	122	269	17	111	64	49	241	510
	1940-44	15	70	61	13	5	164	189	353	11	97	58	29	195	548
	1945-49	29	41	89	10	13	182	167	349	26	93	53	62	234	583
	1950-54	42	203	184	27	83	539	379	918	89	242	89	130	550	1468
	1955-59	59	165	163	38	85	510	335	845	68	268	136	138	610	1455
	1960-61	39	90	82	19	79	309	152	461	31	109	52	59	251	712
TOTAL,	1920-61	233	717	776	162	288	2176	1575	3751	270	1136	552	564	2522	6273

Table 8

DOCTORATE PRODUCTION IN TEN FIELDS BY 40 LEADING SCHOOLS, BY FIVE-YEAR PERIODS

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
CORNELL	1920-24	7	23	38	5	4	77	103	180	15	21	38	4	78	258
UNIVERSITY	1925-29	16	29	64	9	9	127	124	251	17	57	72	13	159	410
	1930-34	29	32	71	23	21	176	241	417	11	57	111	37	216	633
2120	1935-39	12	35	69	10	19	145	247	392	22	91	108	26	247	639
	1940-44	13	27	78	12	36	166	272	438	14	69	66	17	166	604
	1945-49	18	29	75	5	33	160	294	454	22	71	57	41	191	645
	1950-54	16	87	104	14	83	304	439	743	54	165	115	96	430	1173
	1955-59	17	64	88	9	94	272	367	639	44	138	90	75	347	986
	1960-61	6	37	38	8	48	137	168	305	20	64	58	40	182	487
TOTAL,	1920-61	134	363	625	95	347	1564	2255	3819	219	733	715	349	2016	5835
NEW YORK	1920-24		1	11	3		15	6	21	3	7	34	15	59	80
UNIVERSITY	1925-29	3	8	18	3	1	33	6	39	9	22	68	45	144	183
	1930-34	4	18	46	3		71	30	101	16	59	135	148	358	459
2165	1935-39	10	22	63	2		97	27	124	13	27	106	294	440	564
	1940-44	12	17	57	2	2	90	42	132	6	25	65	366	462	594
	1945-49	17	11	37	2	13	80	26	106	13	16	71	254	354	460
	1950-54	42	48	89	14	32	225	75	300	112	85	163	514	874	1174
	1955-59	71	59	64	12	32	238	92	330	309	152	192	456	1109	1439
	1960-61	32	22	28	8	23	113	38	151	103	92	110	183	488	639
TOTAL,	1920-61	191	206	413	49	103	962	342	1304	584	485	944	2275	4288	5592
UNIVERSITY OF	1920-24	3	18	20	2	6	49	22	71	4	9	23	6	42	113
MICHIGAN	1925-29	8	32	24	12	26	102	47	149	13	51	37	12	113	262
	1930-34	34	50	48	11	68	211	106	317	15	58	48	28	149	466
3430	1935-39	25	42	53	14	66	200	121	321	21	48	71	28	168	489
	1940-44	24	33	82	12	44	195	141	336	18	66	90	45	219	555
	1945-49	21	31	37	8	36	133	82	215	26	50	54	59	189	404
	1950-54	52	71	105	25	148	401	233	634	139	133	185	141	598	1232
	1955-59	46	67	109	25	178	425	245	670	140	176	258	163	737	1407
	1960-61	14	23	47	19	90	193	92	285	80	75	133	65	353	638
TOTAL,	1920-61	227	367	525	128	662	1909	1089	2998	456	666	899	547	2568	5566
OHIO STATE	1920-24		5	43		3	51	25	76	3	1	5	3	12	88
UNIVERSITY	1925-29		7	66		13	86	56	142	35	21	10	30	96	238
	1930-34	17	18	91	1	39	166	85	251	53	53	40	61	207	458
3142	1935-39	15	21	101	5	20	162	84	246	35	54	40	60	189	435
	1940-44	11	22	123	2	13	171	113	284	27	55	39	91	212	496
	1945-49	6	33	118	5	44	206	127	333	50	84	46	100	280	613
	1950-54	20	78	209	15	107	429	298	727	144	110	155	175	584	1311
	1955-59	12	54	149	20	84	319	275	594	146	131	184	178	639	1233
	1960-61	6	22	54	7	45	134	114	248	52	71	99	63	285	533
TOTAL,	1920-61	87	260	954	55	368	1724	1177	2901	545	580	618	761	2504	5405
YALE UNIVERSITY	1920-24	2	12	49	11		74	45	119	2	17	82	8	109	228
	1925-29	8	20	52	13	2	95	95	190	12	36	114	27	189	379
	1930-34	8	25	58	10	18	119	99	218	25	61	204	64	354	572
1618	1935-39	12	27	74	17	24	154	96	250	35	95	186	60	376	626
	1940-44	5	16	68	9	36	134	97	231	15	72	171	53	311	542
	1945-49	8	46	48	13	35	150	47	197	35	71	161	38	305	502
	1950-54	18	80	104	30	46	278	123	401	36	161	298	68	563	964
	1955-59	31	75	82	34	76	298	117	415	49	158	339	41	587	1002
	1960-61	13	29	36	12	30	120	51	171	22	78	185		285	456
TOTAL,	1920-61	105	330	571	149	267	1422	770	2192	231	749	1740	359	3079	5271
UNIVERSITY OF	1920-24	2	10	10	7		29	51	80	7	8	5	5	25	105
MINNESOTA	1925-29	5	11	24	11	3	54	117	171	20	33	10	20	83	254
	1930-34	4	11	34	17	14	80	176	256	27	48	7	12	94	350
4133	1935-39	3	15	68	14	17	117	167	284	38	46	31	25	140	424
	1940-44	2	3	87	6	19	117	248	365	36	62	30	31	159	524
	1945-49	16	10	56	8	28	118	194	312	52	71	26	35	184	496
	1950-54	26	25	110	21	59	241	374	615	114	143	76	72	405	1020
	1955-59	26	26	106	16	81	255	369	624	157	175	116	109	557	1181
	1960-61	8	13	37	4	34	96	147	243	52	60	70	52	234	477
TOTAL,	1920-61	92	124	532	104	255	1107	1843	2950	503	646	371	361	1881	4831

Table 8

DOCTORATE PRODUCTION IN TEN FIELDS BY 40 LEADING SCHOOLS, BY FIVE-YEAR PERIODS

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
STATE UNIVER-	1920-24	3	11	11	6	1	32	15	47	18	25	11	21	75	122
SITY OF IOWA	1925-29	5	11	45	11	1	73	24	97	45	40	26	60	171	268
	1930-34	9	20	58	12	8	107	34	141	58	66	67	63	254	395
4222	1935-39	11	11	70	12	17	121	72	193	84	63	83	42	272	465
	1940-44	8	6	67	13	11	105	65	170	51	50	111	27	239	409
	1945-49	4	3	40	9	17	73	40	113	52	54	114	45	265	378
	1950-54	14	25	69	11	40	159	116	275	116	111	231	122	580	855
	1955-59	7	14	65	9	28	123	123	246	73	64	194	137	468	714
	1960-61	4	6	33	3	7	53	62	115	40	24	105	54	223	338
TOTAL,	1920-61	65	107	458	86	130	846	551	1397	537	497	942	571	2547	3944
STANFORD	1920-24		2	10	5		17	15	32	7	5	9	13	34	66
UNIVERSITY	1925-29	2	4	26	13	3	48	32	80	12	39	23	20	94	174
	1930-34	3	4	38	9	9	63	31	94	22	41	22	37	122	216
9355	1935-39	4	8	38	9	5	64	34	98	11	45	39	43	138	236
	1940-44	6	6	40	3	15	70	37	107	12	27	29	75	143	250
	1945-49	7	6	48	9	34	104	43	147	21	39	31	199	290	437
	1950-54	16	32	57	31	112	248	70	318	54	93	103	310	560	878
	1955-59	33	57	53	43	146	332	69	401	49	97	112	251	509	910
	1960-61	25	23	9	34	92	183	29	212	21	51	72	63	207	419
TOTAL,	1920-61	96	142	319	156	416	1129	360	1489	209	437	440	1011	2097	3586
MASS INSTITUTE	1920-24	1	4	32	6	12	55	2	57						57
OF TECHNOLOGY	1925-29	4	4	30	5	33	76	7	83						83
	1930-34	13	5	50	10	70	148	5	153						153
1427	1935-39	19	48	112	18	56	253	10	263						263
	1940-44	12	51	134	21	73	291	12	303			1		1	304
	1945-49	22	95	98	28	160	403	15	418	10		9		19	437
	1950-54	38	169	156	52	333	748	26	774	6	28	6		40	814
	1955-59	38	140	184	44	367	773	26	799	3	47	3		53	852
	1960-61	23	47	92	24	185	371	11	382		33	1		34	416
TOTAL,	1920-61	170	563	888	208	1289	3118	114	3232	19	108	20		147	3379
UNIVERSITY OF	1920-24	2	4	9			15	8	23	11	43	29	17	100	123
PENNSYLVANIA	1925-29	9	9	20			38	25	63	17	67	46	28	158	221
	1930-34	12	10	20	1		43	54	97	22	83	100	40	245	342
2384	1935-39	6	10	21	2	3	42	62	104	7	81	80	22	190	294
	1940-44	8	11	50		3	72	55	127	8	55	45	22	130	257
	1945-49	9	11	36		12	68	63	131	5	66	69	41	181	312
	1950-54	17	42	70		32	161	131	292	40	172	105	40	357	649
	1955-59	20	40	78		30	168	126	294	41	203	160	57	461	755
	1960-61	9	19	55		34	117	61	178	23	87	75	20	205	383
TOTAL,	1920-61	92	156	359	3	114	724	585	1309	174	857	709	287	2027	3336
JOHNS HOPKINS	1920-24	8	20	56	12	2	98	99	197	18	33	29	3	83	280
UNIVERSITY	1925-29	15	27	71	17	8	138	132	270	22	55	38	11	126	396
	1930-34	10	25	92	12	18	157	143	300	19	78	70	21	188	488
5206	1935-39	6	16	65	10	18	115	99	214	11	45	69	11	136	350
	1940-44	2	17	44	9	20	92	74	166	2	27	45	12	86	252
	1945-49	6	22	28	15	26	97	42	139	8	31	32	9	80	219
	1950-54	4	50	51	21	54	180	98	278	16	52	67	10	145	423
	1955-59	3	47	28	22	67	167	107	274	17	64	54	7	142	416
	1960-61	3	27	18	13	30	91	38	129	10	31	30	4	75	204
TOTAL,	1920-61	57	251	453	131	243	1135	832	1967	123	416	434	88	1061	3028
PURDUE	1920-24														
UNIVERSITY	1925-29					1	1		1						1
	1930-34		1	13		4	18	11	29						29
3226	1935-39	1	10	47		4	62	17	79	1	2			3	82
	1940-44	3	17	98		9	127	39	166	19	7	1	1	28	194
	1945-49	3	11	129		50	193	50	243	32	14	4	2	52	295
	1950-54	20	33	218		165	436	192	628	122	34	21	8	185	813
	1955-59	38	41	193		164	436	287	723	166	37	25	18	246	969
	1960-61	16	16	91		105	228	139	367	47	26	18	13	104	471
TOTAL,	1920-61	81	129	789		502	1501	735	2236	387	120	69	42	618	2854

Table 8

DOCTORATE PRODUCTION IN TEN FIELDS BY 40 LEADING SCHOOLS, BY FIVE-YEAR PERIODS

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
NORTHWESTERN	1920-24		3	8			11	3	14			8	3	11	25
UNIVERSITY	1925-29		1	14	1		16	10	26	3	6	20	2	31	57
	1930-34		7	28	3		38	33	71	6	35	36	17	94	165
3369	1935-39	2	11	40	2		55	57	112	11	30	42	16	99	211
	1940-44	5	2	55	5		67	48	115	18	44	58	37	157	272
	1945-49	6	8	65	1	13	93	28	121	15	31	91	50	187	308
	1950-54	8	22	115	9	56	210	70	280	58	89	184	77	408	688
	1955-59	7	20	92	9	70	198	42	240	48	99	193	92	432	672
	1960-61	1	10	33	10	48	102	24	126	25	38	63	26	152	278
TOTAL,	1920-61	29	84	450	40	187	790	315	1105	184	372	695	320	1571	2676
IOWA ST UNIV	1920-24			5			5	18	23						23
OF SCI & TECH	1925-29			34		1	35	55	90		1			1	91
	1930-34	1	2	48		8	59	112	171		1		1	2	173
4212	1935-39	4	13	61		8	86	139	225		2			2	227
	1940-44	9	10	71	1	3	94	145	239		6	5	3	14	253
	1945-49	14	7	57		20	98	129	227		22	4	7	33	260
	1950-54	25	38	111		70	244	266	510		64	3	19	86	596
	1955-59	21	32	131	4	72	260	269	529		62	4	20	86	615
	1960-61	13	17	63	7	47	147	106	253		26	1	2	29	282
TOTAL,	1920-61	87	119	581	12	229	1028	1239	2267		184	17	52	253	2520
INDIANA	1920-24		3	4	1		8	6	14	3	3	4	2	12	26
UNIVERSITY	1925-29	1	8	11	1		21	7	28	8	8	5	10	31	59
	1930-34	4	15	15	5		39	8	47	6	4	6	20	36	83
3220	1935-39	1	20	30	1		52	11	63	8	10	6	8	32	95
	1940-44	1	3	43	2		49	16	65	9	16	4	36	65	130
	1945-49	4	12	28	2		46	17	63	12	15	11	49	87	150
	1950-54	12	28	49	8		97	67	164	49	101	94	259	503	667
	1955-59	16	29	45	16		106	65	171	42	111	169	358	680	851
	1960-61	11	9	22	8		50	22	72	31	58	99	177	365	437
TOTAL,	1920-61	50	127	247	44		468	219	687	168	326	398	919	1811	2498
PRINCETON	1920-24	9	12	23	8	1	53	5	58	1	10	25		36	94
UNIVERSITY	1925-29	5	24	27	13		69	7	76	9	17	33		59	135
	1930-34	17	18	43	21		99	14	113	6	36	59		101	214
2221	1935-39	23	23	42	26		114	14	128	7	40	74		121	249
	1940-44	23	17	44	17		101	17	118	12	38	64		114	232
	1945-49	38	21	71	15	10	155	8	163	10	32	59		101	264
	1950-54	57	60	62	38	26	243	22	265	24	77	99		200	465
	1955-59	57	70	64	35	44	270	23	293	25	107	104		236	529
	1960-61	23	33	29	18	34	137	8	145	13	70	48		131	276
TOTAL,	1920-61	252	278	405	191	115	1241	118	1359	107	427	565		1099	2458
UNIVERSITY OF	1920-24	1					1		1			1	2	3	4
TEXAS	1925-29	5	3				8	3	11		8	3	5	16	27
	1930-34	5	5	12	2		24	18	42	2	26	15	19	62	104
7460	1935-39	4	8	36	1	2	51	21	72	3	38	21	22	84	156
	1940-44	5	8	55	4	1	73	24	97	1	42	17	41	101	198
	1945-49	4	3	35	2	15	59	24	83	10	50	33	62	155	238
	1950-54	19	48	103	10	41	221	54	275	62	97	83	112	354	629
	1955-59	23	51	98	14	57	243	115	358	85	95	131	119	430	788
	1960-61	12	9	32	7	24	84	48	132	45	27	59	43	174	306
TOTAL,	1920-61	78	135	371	40	140	764	307	1071	208	383	363	425	1379	2450
PENNSYLVANIA ST	1920-24														
UNIVERSITY	1925-29		1	6			7	2	9		1	2	1	4	13
	1930-34		7	35		2	44	10	54	1	1	3	13	18	72
2362	1935-39		11	52		9	72	29	101	3		8	17	28	129
	1940-44		15	104	1	3	123	54	177	9	1	9	32	51	228
	1945-49		14	59	1	22	96	31	127	15	4	5	27	51	178
	1950-54	2	28	120	19	75	244	85	329	67	32	21	154	274	603
	1955-59	4	33	98	42	68	245	99	344	87	30	42	176	335	679
	1960-61		27	55	33	40	155	48	203	28	18	16	92	154	357
TOTAL,	1920-61	6	136	529	96	219	986	358	1344	210	87	106	512	915	2259

Table 8

DOCTORATE PRODUCTION IN TEN FIELDS BY 40 LEADING SCHOOLS, BY FIVE-YEAR PERIODS

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
CATHOLIC UNIV	1920-24			3			3	2	5	2	15	41	12	70	75
OF AMERICA	1925-29	2	3	8			13	9	22	6	27	74	15	122	144
	1930-34	8	3	6		1	18	6	24	4	29	111	26	170	194
5302	1935-39	6	3	9		1	19	16	35	9	46	122	24	201	236
	1940-44	9	4	10	3		26	17	43	19	66	227	30	342	385
	1945-49	6	7	8			21	4	25	13	51	160	19	243	268
	1950-54	7	33	25		1	66	25	91	31	61	191	47	330	421
	1955-59	9	39	32		4	84	21	105	37	54	140	40	271	376
	1960-61	4	10	14		1	29	20	49	12	20	52	18	102	151
TOTAL,	1920-61	51	102	115	3	8	279	120	399	133	369	1118	231	1851	2250
UNIVERSITY OF	1920-24			21	1	1	23	3	26			2	1	3	29
PITTSBURGH	1925-29	2	5	30		2	39	9	48		1	5	9	15	63
	1930-34	12	7	27	1	8	55	54	109	6	18	32	37	93	202
2385	1935-39	4	11	21		2	38	26	64	6	26	40	83	155	219
	1940-44	6	9	48		4	67	27	94	5	27	24	111	167	261
	1945-49	10	9	27		17	63	16	79	18	24	21	82	145	224
	1950-54	16	18	62	1	17	114	28	142	89	61	35	164	349	491
	1955-59	23	21	58	1	19	122	62	184	49	65	39	180	333	517
	1960-61	19	16	21	1	29	86	33	119	22	19	34	42	117	236
TOTAL,	1920-61	92	96	315	5	99	607	258	865	195	241	232	709	1377	2242
UNIVERSITY OF	1920-24														
SOUTHERN CALIF	1925-29									1	2			3	3
	1930-34			2			2	3	5	6	12	1	6	25	30
9358	1935-39		1	6	2		9	15	24	5	36	32	42	115	139
	1940-44		1	6			7	12	19	7	47	29	47	130	149
	1945-49			8		1	9	16	25	21	38	43	67	169	194
	1950-54	7	12	28	4	4	55	48	103	61	65	133	171	430	533
	1955-59	5	11	35	8	5	64	71	135	53	113	154	274	594	729
	1960-61	4	6	9	2	1	22	24	46	29	47	74	117	267	313
TOTAL,	1920-61	16	31	94	16	11	168	189	357	183	360	466	724	1733	2090
UNIVERSITY OF	1920-24			5			5	2	7			5	1	6	13
NORTH CAROLINA	1925-29			13	2		15	1	16	1	20	20	2	43	59
	1930-34	1	3	19	1		24	2	26	9	21	34	6	70	96
5640	1935-39	4	11	25	3	1	44	9	53	6	28	35	9	78	131
	1940-44	2	4	38	5		49	10	59	4	38	28	4	74	133
	1945-49	14	3	29	3		49	29	78	6	46	54	8	114	192
	1950-54	37	19	55	5	7	123	79	202	18	130	90	37	275	477
	1955-59	53	17	42	4	20	136	141	277	25	122	98	49	294	571
	1960-61	15	10	16	2	8	51	79	130	16	56	50	27	149	279
TOTAL,	1920-61	126	67	242	25	36	496	352	848	85	461	414	143	1103	1951
UNIV OF CALI-	1920-24														
FORNIA L A	1925-29														
	1930-34														
9365	1935-39							1	1	1	4			5	6
	1940-44		5	14	1		20	15	35	7	26	6	1	40	75
	1945-49	5	6	29	10	2	52	31	83	13	33	20	39	105	188
	1950-54	21	47	56	45	21	190	90	280	82	55	29	81	247	527
	1955-59	38	43	86	47	31	245	127	372	83	76	65	109	333	705
	1960-61	20	27	25	12	19	103	64	167	32	56	32	67	187	354
TOTAL,	1920-61	84	128	210	115	73	610	328	938	218	250	152	297	917	1855
UNIVERSITY OF	1920-24			1		1	2	1	3		1	3	2	6	9
WASHINGTON	1925-29	2		5	1	3	11	7	18	2	3	16	15	36	54
	1930-34	3	2	17	1	2	25	18	43		13	11	20	44	87
9113	1935-39	1	13	23	3		40	46	86		16	33	13	62	148
	1940-44	2	12	41			55	27	82		9	19	14	42	124
	1945-49	3	5	19	2		29	22	51	1	19	18	19	57	108
	1950-54	12	21	82	10	12	137	52	189	22	58	40	40	160	349
	1955-59	21	24	90	37	24	196	94	290	50	108	90	55	303	593
	1960-61	9	20	47	11	14	101	35	136	21	36	46	8	111	247
TOTAL,	1920-61	53	97	325	65	56	596	302	898	96	263	276	186	821	1719

Table 8

DOCTORATE PRODUCTION IN TEN FIELDS BY 40 LEADING SCHOOLS, BY FIVE-YEAR PERIODS

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
MICHIGAN ST UNI	1920-24														
OF AG & AP SCI	1925-29			1			1	14	15		2			2	17
	1930-34			8		1	9	19	28		3			3	31
3421	1935-39		1	12			13	34	47		1			1	48
	1940-44			11			11	30	41		1			1	42
	1945-49		2	15		3	20	40	60		6		4	10	70
	1950-54	2	8	38		23	71	193	264	19	38	12	73	142	406
	1955-59	17	18	70	4	48	157	254	411	73	52	22	122	269	680
	1960-61	7	10	28	2	23	70	131	201	37	52	40	80	209	410
TOTAL,	1920-61	26	39	183	6	98	352	715	1067	129	155	74	279	637	1704
UNIVERSITY OF	1920-24	2	1	2	2		7	7	14				2	2	16
MISSOURI	1925-29	5	1	2			8	13	21	1	3	3	9	16	37
	1930-34	4	2	4	5	1	16	23	39		10	7	22	39	78
4338	1935-39	5	6	14	1	1	27	40	67		8	7	28	43	110
	1940-44	2	6	15	1	2	26	41	67		12	8	43	63	130
	1945-49	1	3	21	2	4	31	21	52		18	7	56	81	133
	1950-54	7	15	39	5	25	91	87	178	4	25	28	134	191	369
	1955-59	7	14	38	8	14	81	77	158	21	27	34	130	212	370
	1960-61	4	6	12	2	6	30	51	81	12	23	12	56	103	184
TOTAL,	1920-61	37	54	147	26	53	317	360	677	38	126	106	480	750	1427
CALIFORNIA INST	1920-24		6	6			12		12						12
OF TECHNOLOGY	1925-29	5	36	21		7	69	1	70						70
	1930-34	5	46	29	18	23	121	7	128						128
9305	1935-39	10	46	31	16	29	132	14	146						146
	1940-44	7	27	35	6	21	96	25	121						121
	1945-49	15	35	39	11	41	141	21	162						162
	1950-54	22	65	64	23	118	292	38	330						330
	1955-59	11	74	65	23	98	271	31	302						302
	1960-61	8	33	26	15	44	126	12	138						138
TOTAL,	1920-61	83	368	316	112	381	1260	149	1409						1409
FORDHAM	1920-24	1		1			2	1	3	1	16	48	13	78	81
UNIVERSITY	1925-29	1		15			16		16	1	24	82	36	143	159
	1930-34			16			16	4	20	1	31	38	34	104	124
2123	1935-39		1	5			6	15	21	7	24	24	23	78	99
	1940-44			10	1		11	18	29	19	20	20	9	68	97
	1945-49			10	2		12	26	38	21	24	31	17	93	131
	1950-54		12	40			52	31	83	27	35	54	42	158	241
	1955-59		9	23	1		33	40	73	58	60	79	44	241	314
	1960-61		2	12			14	15	29	24	15	32	19	90	119
TOTAL,	1920-61	2	24	132	4		162	150	312	159	249	408	237	1053	1365
BOSTON	1920-24							1	1			10		10	11
UNIVERSITY	1925-29							1	1		2	26	2	30	31
	1930-34		5				5	3	8		2	28	4	34	42
1409	1935-39		7	1			8	9	17	2	2	42	3	49	66
	1940-44		2	5			7	7	14	3	5	45	13	66	80
	1945-49		3				3	6	9	3	10	59	26	98	107
	1950-54	3	10	13	2		28	28	56	33	20	131	87	271	327
	1955-59	5	5	20	6		36	36	72	60	33	125	146	364	436
	1960-61	4	2	14	5		25	12	37	32	23	72	73	200	237
TOTAL,	1920-61	12	34	53	13		112	103	215	133	97	538	354	1122	1337
DUKE UNIVERSITY	1920-24														
	1925-29			4			4	2	6		1			1	7
	1930-34	3	4	14			21	11	32	6	24	15	1	46	78
5612	1935-39	4	9	17			30	32	62	8	43	20	6	77	139
	1940-44	10	6	20			36	36	72	6	32	27	9	74	146
	1945-49	9	7	26			42	32	74	10	23	24	2	59	133
	1950-54	11	33	43			87	68	155	32	48	51	13	144	299
	1955-59	12	39	41			92	86	178	30	81	66	14	191	369
	1960-61	4	18	12			34	34	68	13	27	34	18	92	160
TOTAL,	1920-61	53	116	177			346	301	647	105	279	237	63	684	1331

Table 8

DOCTORATE PRODUCTION IN TEN FIELDS BY 40 LEADING SCHOOLS, BY FIVE-YEAR PERIODS

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
UNIVERSITY OF	1920-24							3	3						3
MARYLAND	1925-29			11			11	16	27		2	1		3	30
	1930-34			14			14	28	42			1		1	43
5226	1935-39	1		34		3	38	50	88		3			3	91
	1940-44	3	1	37		4	45	58	103	1	2	4	2	9	112
	1945-49		2	40		2	44	43	87	4	8		3	15	102
	1950-54	8	13	48	1	7	77	117	194	17	27	14	39	97	291
	1955-59	15	42	58	1	23	139	156	295	36	21	17	77	151	446
	1960-61	9	22	21		10	62	52	114	10	16	8	35	69	183
TOTAL,	1920-61	36	80	263	2	49	430	523	953	68	79	45	156	348	1301
RUTGERS THE	1920-24							20	20						20
ST UNIVERSITY	1925-29			3		1	4	20	24						24
	1930-34			4		1	5	29	34						34
2223	1935-39		3	12	2	1	18	37	55				13	13	68
	1940-44		1	11		2	14	38	52	3			16	19	71
	1945-49			11		9	20	53	73		1		5	6	79
	1950-54	2	10	37	2	12	63	154	217		4	5	25	34	251
	1955-59	3	18	66	7	14	108	202	310	2	14	8	57	81	391
	1960-61	2	5	33		7	47	86	133	9	6	5	22	42	175
TOTAL,	1920-61	7	37	177	11	47	279	639	918	14	25	18	138	195	1113
SYRACUSE UNIV	1920-24												1	1	1
	1925-29			4			4	3	7	2	3	2		7	14
	1930-34			4	1		5	4	9	2	2	3	1	8	17
2187	1935-39		1	12			13	8	21	10	7	3	2	22	43
	1940-44			4			4	2	6	5	6	4		15	21
	1945-49	3		9	2	1	15	9	24	7	15	3	26	51	75
	1950-54	16	18	34	8	10	86	64	150	39	60	33	55	187	337
	1955-59	12	30	28	5	25	100	37	137	40	107	30	81	258	395
	1960-61	2	13	4		13	32	15	47	10	55	16	33	114	161
TOTAL,	1920-61	33	62	99	16	49	259	142	401	115	255	94	199	663	1064
UNIVERSITY OF	1920-24		1	7	1		9	3	12			5		5	17
NEBRASKA	1925-29	1		8			9	8	17		3	1	5	9	26
	1930-34			28			28	12	40	5	16	4	4	29	69
4618	1935-39	4	1	19			24	25	49	8	13	4	16	41	90
	1940-44	1		22	1		24	23	47	11	16	5	30	62	109
	1945-49	2		16	1		19	25	44	4	9	3	26	42	86
	1950-54	1	5	33	2		41	44	85	49	43	9	39	140	225
	1955-59	1	5	25	2		33	56	89	35	40	13	100	188	277
	1960-61	3	3	12	5		23	32	55	9	13	7	60	89	144
TOTAL,	1920-61	13	15	170	12		210	228	438	121	153	51	280	605	1043
GRAND TOTAL	1920-24	107	237	710	129	45	1228	810	2038	185	586	775	287	1833	3871
LEADING 40	1925-29	220	384	1096	184	152	2036	1376	3412	403	1185	1349	763	3700	7112
INSTITUTION	1930-34	344	538	1576	271	375	3104	2127	5231	485	1710	2065	1242	5502	10733
	1935-39	332	655	1884	299	365	3535	2415	5950	526	1767	2250	1421	5964	11914
	1940-44	315	583	2329	222	386	3835	2770	6605	470	1795	2106	1850	6221	12826
	1945-49	393	679	2056	284	819	4231	2485	6716	659	1948	2047	2283	6937	13653
	1950-54	827	1995	3644	668	2253	9387	5663	15050	2174	4499	4418	5206	16297	31347
	1955-59	978	1906	3366	806	2549	9605	6012	15617	2677	4893	4921	5620	18111	33728
	1960-61	479	863	1471	412	1444	4669	2633	7302	1149	2231	2476	2327	8183	15485
TOTAL,	1920-61	3995	7840	18132	3275	8388	41630	26291	67921	8728	20614	22407	20999	72748	140669

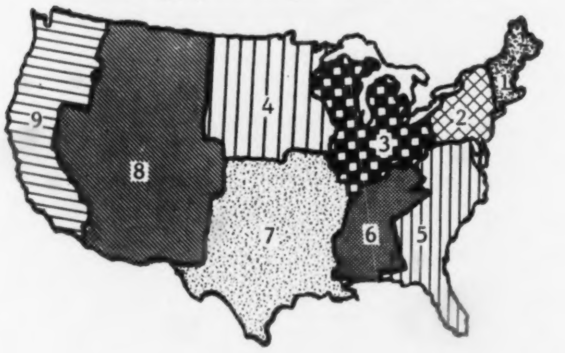
CHAPTER II

BACCALAUREATE ORIGINS OF UNITED STATES DOCTORATES

Of all students entering the elementary grades in the United States, only one out of several hundred eventually reaches the doctorate level. Of those graduating from high school, about one in 300 will attain the doctorate. Of those graduating from college, perhaps one or two per cent will eventually receive third level degrees. The likelihood of a student's attaining a doctorate degree varies according to the area of the country in which he lives, the high school he attends, the undergraduate institution from which he graduates, the discipline of his undergraduate major, and a number of other factors. And for boys, the probability is about eight times as high as for girls, other things being equal. Of all the factors relating to doctorate productivity, the geographic and institutional ones are selected for discussion in this chapter.

Figure 9

A. Geographic Regions of U.S.A.

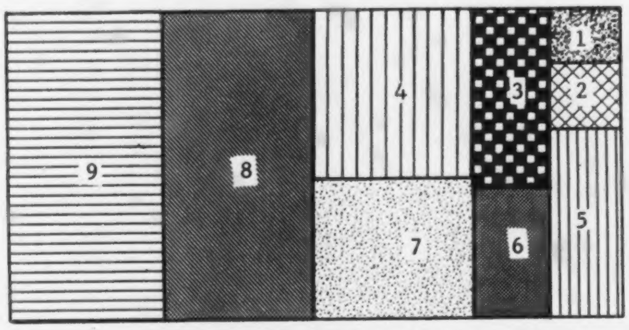


The several regions of the country vary tremendously in numbers and percentages of their residents who eventually attain doctorates. Figure 9 shows the nine geographic regions of the U.S., and, in diagrammatic fashion, their land areas, population, and relative "size" as baccalaureate sources of doctorates, and as regions of doctorate production.

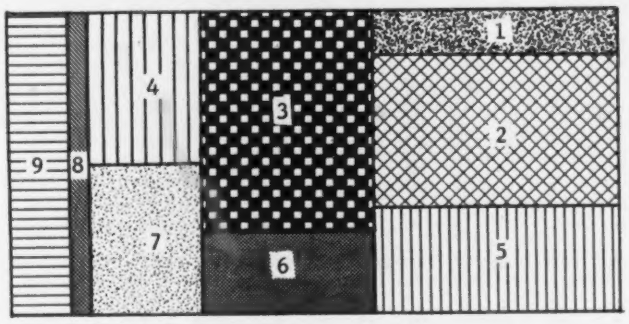
Note: The "Pacific" region in reality is "Pacific and insular" including all non-contiguous areas: Alaska, Hawaii, Canal Zone, and Puerto Rico.

Table 9 gives the basic data on baccalaureate origins by region and state for each of 29 fields of doctorate, for the period 1920-1961.

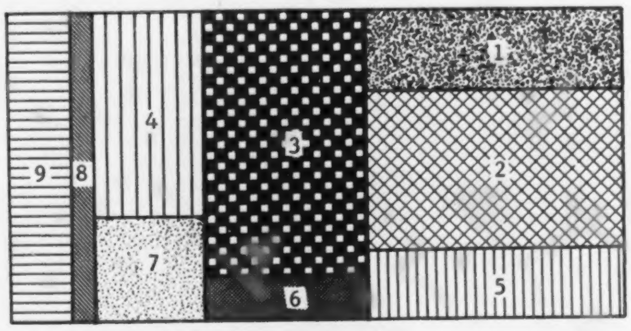
B. Relative Land Areas of Regions of United States



C. Relative Population "Size" of Regions of U.S.



D. Regions as Baccalaureate Origins of Doctorates



E. Regions of United States as Doctorate Producers

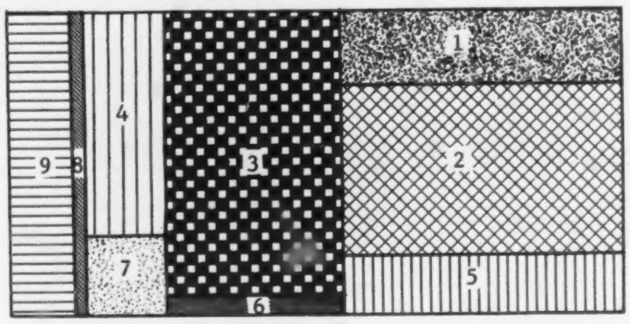


Table 9

U.S. STATES AND REGIONS AS BACCALAUREATE ORIGINS OF DOCTORATES, 1920-1961 TOTAL, NATURAL SCIENCES

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat., Cytol., Embryol.	Physiology and Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology and Entomology	Bio-Sciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
MAINE	11	21	53	118	18	19	229	45	10	4	28	10	23	14	63	28	225	454
NEW HAMPSHIRE	12	17	40	204	59	25	345	44	18	6	13	15	27	29	65	19	236	581
VERMONT	13	12	16	102	10	11	151	17	6	1	13	11	15	9	17	5	94	245
MASSACHUSETTS	14	352	854	1378	261	676	3521	82	96	39	254	197	167	104	296	151	1386	4907
RHODE ISLAND	15	38	59	211	20	32	360	26	13	4	35	17	40	36	48	28	247	607
CONNECTICUT	16	72	202	403	79	153	909	35	35	8	57	55	34	66	90	39	419	1328
TOTAL NEW ENGLAND		512	1224	2416	447	916	5515	249	178	62	400	305	306	258	579	270	2607	8122
NEW YORK	21	700	1265	2928	317	1233	6443	212	158	76	418	506	267	406	590	222	2855	9298
NEW JERSEY	22	68	173	431	85	151	908	89	28	8	78	68	58	51	87	33	500	1408
PENNSYLVANIA	23	308	641	1853	127	678	3607	177	149	37	225	253	194	262	339	99	1735	5342
TOTAL MIDDLE ATLANTIC		1076	2079	5212	529	2062	10958	478	335	121	721	827	519	719	1016	354	5090	16048
OHIO	31	230	602	1491	182	405	2910	150	61	44	170	184	276	141	373	91	1490	4400
INDIANA	32	110	261	787	75	426	1659	121	54	21	115	96	169	108	175	52	911	2570
ILLINOIS	33	380	524	1923	259	561	3647	206	98	72	328	293	240	183	335	86	1841	5488
MICHIGAN	34	148	312	854	115	460	1889	229	56	42	137	120	157	143	258	53	1195	3084
WISCONSIN	35	59	170	556	93	230	1108	191	52	20	122	181	149	115	200	46	1076	2184
TOTAL EAST N CENTRAL		927	1869	5611	724	2082	11213	897	321	199	872	874	991	690	1341	328	6513	17726
MINNESOTA	41	109	178	561	84	196	1128	158	96	30	85	155	138	91	130	54	937	2065
IOWA	42	119	179	590	67	211	1166	149	32	16	141	113	120	86	179	59	895	2061
MISSOURI	43	104	203	513	94	185	1099	136	18	31	78	87	95	37	99	27	608	1707
NORTH DAKOTA	44	5	14	88	5	24	136	32	3	1	8	24	11	19	13	8	119	255
SOUTH DAKOTA	45	12	33	133	16	39	233	37	7	8	20	31	27	20	24	10	184	417
NEBRASKA	46	38	77	268	23	36	442	111	19	10	62	40	89	34	58	39	462	904
KANSAS	47	71	139	380	41	111	742	115	24	26	75	51	78	64	199	45	677	1419
TOTAL WEST N CENTRAL		458	823	2533	330	802	4946	738	199	122	469	501	558	351	702	242	3882	8828
DELAWARE	51	4	4	31		15	54	15	1		1	3	10	5	3	1	39	93
MARYLAND	52	64	138	337	50	204	793	72	19	7	77	55	42	80	90	30	472	1265
D.C.	53	36	58	167	10	23	294	5	12	17	42	37	28	17	59	16	233	527
VIRGINIA	54	56	155	377	41	94	723	63	15	7	34	34	58	26	79	30	346	1069
WEST VIRGINIA	55	23	26	176	13	53	291	66	5	5	21	28	57	13	48	12	255	546
NORTH CAROLINA	56	68	134	276	25	85	588	73	20	4	32	35	81	24	73	27	369	957
SOUTH CAROLINA	57	36	45	177	4	48	310	56	7	4	22	18	26	4	57	17	211	521
GEORGIA	58	33	70	225	15	103	446	60	11	6	32	17	35	25	66	18	270	716
FLORIDA	59	43	31	171	5	24	274	59	12	2	37	22	38	22	49	13	254	528
TOTAL SOUTH ATLANTIC		363	661	1937	163	649	3773	469	102	52	298	249	375	216	524	164	2449	6222
KENTUCKY	61	50	82	233	20	55	440	92	7	8	53	19	30	37	55	14	315	755
TENNESSEE	62	45	71	247	13	50	426	44	15	15	30	35	41	31	61	11	283	709
ALABAMA	63	35	57	151	11	42	296	60	12	10	34	19	25	18	58	11	247	543
MISSISSIPPI	64	31	29	100	9	22	191	49	3	1	14	10	34	14	38	13	176	367
TOTAL EAST S CENTRAL		161	239	731	53	169	1353	245	37	34	131	83	130	100	212	49	1021	2374
ARKANSAS	71	22	20	111	5	24	182	39	4	1	15	13	37	11	29	15	164	346
LOUISIANA	72	55	63	188	24	77	407	71	18	9	35	28	43	21	58	11	294	701
OKLAHOMA	73	47	65	147	47	86	392	125	12	3	46	28	53	29	70	26	392	784
TEXAS	74	173	302	582	98	287	1442	114	24	8	97	88	69	83	180	50	713	2155
TOTAL WEST S CENTRAL		297	450	1028	174	474	2423	349	58	21	193	157	202	144	337	102	1563	3986
MONTANA	81	16	46	123	34	48	267	31	8	3	20	28	25	23	39	15	192	459
IDAHO	82	10	12	62	8	14	106	48	9	4	29	13	36	18	19	11	187	293
WYOMING	83	7	7	17	20	5	56	12	1	2	3	8	19	3	10	8	66	122
COLORADO	84	38	99	238	69	117	561	83	29	8	59	63	57	33	75	34	441	1002
NEW MEXICO	85	11	11	30	16	25	93	23	1		9	2	24	2	10	7	78	171
ARIZONA	86	9	15	69	15	19	127	27	2		12	9	18	9	18	4	99	226
UTAH	87	20	111	233	58	120	542	207	19	15	44	66	82	59	98	45	635	1177
NEVADA	88	2	9	14	7	4	36				1	4	3	2	3		13	49
TOTAL MOUNTAIN		113	310	786	227	352	1788	431	69	32	177	193	264	149	272	124	1711	3499
WASHINGTON	91	73	151	336	82	147	789	96	30	13	87	52	72	69	82	20	521	1310
OREGON	92	57	116	273	39	50	535	67	10	8	49	51	55	25	87	22	374	909
CALIFORNIA	93	346	803	1264	361	559	3333	139	57	38	285	278	285	197	469	156	1904	5237
ALASKA	94	1	1	1	4	3	10						1			1	2	12
HAWAII	95		3	26	1	2	32	8	1	1	3	12	5	5	10	10	55	87
PUERTO RICO	98	6	5	12	1	7	31	14	5	1	8	5	13	12	10	1	69	100
TOTAL PACIFIC		483	1079	1912	488	768	4730	324	103	61	432	398	431	308	658	210	2925	7655
UNKNOWN		11	32	57	15	17	132	21	63	3	15	5	13	8	14	14	156	288
TOTAL U S		4401	8766	22223	3150	8291	46831	4201	1465	707	3708	3592	3789	2943	5655	1857	27917	74748

Table 9

U.S. STATES AND REGIONS AS BACCALAUREATE ORIGINS OF DOCTORATES, 1920-1961 TOTAL, SOCIAL SCIENCES, ARTS, AND PROFESSIONS

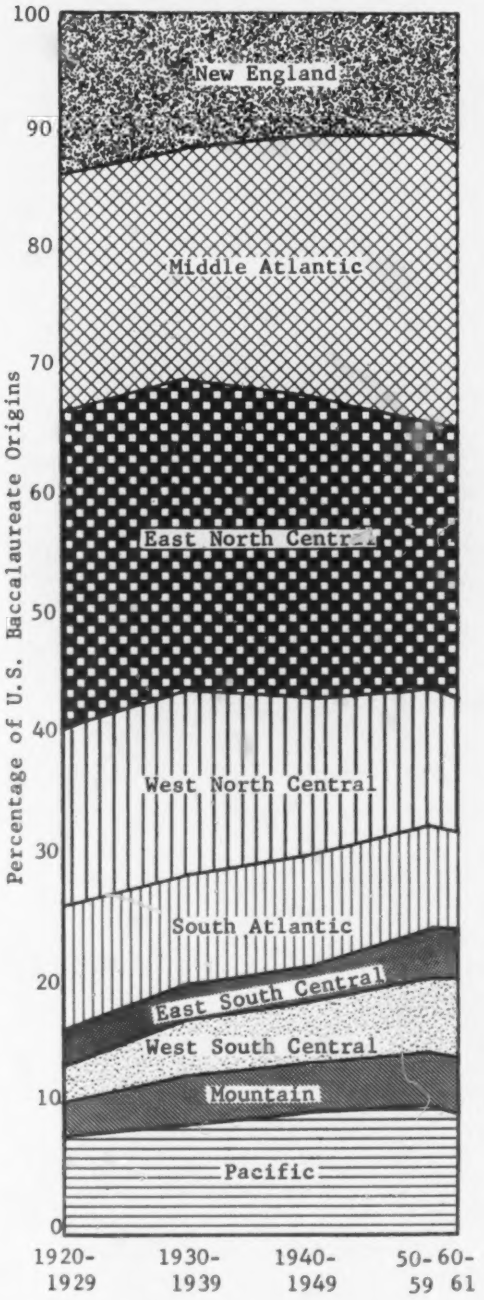
Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, Misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professions	Business Administration	Religion-Theology	Misc. Professions	TOTAL ARTS-PROFESSIONS	Education	TOTAL SOC. SCI.-ARTS-EDUC.	GRAND TOTAL ALL FIELDS		
37	4	10	37	55	31	2	176	57	63	12	20	10	19	9	190	156	522	976	MAINE	11
73	7	27	45	78	37	7	274	65	51	21	22	11	7	12	189	127	590	1171	NEW HAMPSHIRE	12
17	2	5	33	25	15	3	100	23	21	8	10	4	4	1	71	79	250	495	VERMONT	13
556	113	162	390	608	248	75	2152	580	426	212	326	74	122	83	1823	972	4947	9854	MASSACHUSETTS	14
76	6	17	26	45	17	6	193	50	33	14	13	10	13	10	143	87	423	1030	RHODE ISLAND	15
175	27	71	106	222	93	13	707	244	177	66	82	28	50	18	665	260	1632	2960	CONNECTICUT	16
934	159	292	637	1033	441	106	3602	1019	771	333	473	137	215	133	3081	1681	8364	16486	TOTAL NEW ENGLAND	
2150	167	327	681	813	366	122	4626	855	805	389	468	180	206	203	3106	3471	11203	20501	NEW YORK	21
174	15	43	91	160	87	9	579	150	160	57	55	22	41	25	510	406	1495	2903	NEW JERSEY	22
787	51	193	394	381	196	68	2070	512	404	150	206	65	210	44	1591	1940	5601	10943	PENNSYLVANIA	23
3111	233	563	1166	1354	649	199	7275	1517	1369	596	729	267	457	272	5207	5017	18299	34347	TOTAL MIDDLE ATLANTIC	
771	40	221	376	392	201	68	2069	395	311	142	333	98	164	74	1517	1359	4945	9345	OHIO	31
281	17	73	154	232	100	28	885	195	126	62	134	69	99	42	727	838	2450	5020	INDIANA	32
739	114	270	443	462	303	143	2474	464	329	164	361	152	220	93	1783	1536	5793	11281	ILLINOIS	33
390	37	110	176	207	104	72	1096	227	141	100	204	54	64	31	821	875	2792	5876	MICHIGAN	34
195	45	91	242	190	105	49	917	139	120	62	147	52	17	42	579	782	2278	4462	WISCONSIN	35
2376	253	765	1391	1483	813	360	7441	1420	1027	530	1179	425	564	282	5427	5390	18258	35984	TOTAL EAST N CENTRAL	
359	22	76	155	157	94	27	890	156	97	60	128	33	68	44	586	645	2121	4186	MINNESOTA	41
304	5	94	216	180	113	28	940	174	96	43	176	74	70	47	680	757	2377	4438	IOWA	42
214	8	100	168	200	83	34	807	198	159	55	96	45	69	29	651	946	2404	4111	MISSOURI	43
31	1	8	28	21	9	9	107	11	5	1	9	5	3	3	37	134	278	533	NORTH DAKOTA	44
30	2	11	26	25	18	4	116	23	4	1	40	4	12	4	88	138	342	759	SOUTH DAKOTA	45
141	10	36	101	103	36	31	458	60	33	30	52	24	27	19	245	517	1220	2124	NEBRASKA	46
203	5	64	141	108	61	9	591	101	67	19	92	41	58	23	401	663	1655	3074	KANSAS	47
1282	53	389	835	794	414	142	3909	723	461	209	593	226	307	169	2688	3800	10397	19225	TOTAL WEST N CENTRAL	
7	1	2	3	8	2		23	5	6		5	1	1		18	14	55	148	DELAWARE	51
126	5	20	54	83	57	4	349	81	88	52	21	4	37	18	301	244	894	2159	MARYLAND	52
122	9	32	76	146	77	5	467	100	111	104	27	9	402	51	804	214	1485	2012	D.C.	53
117	5	51	102	166	54	14	509	152	93	41	37	20	41	25	409	306	1224	2293	VIRGINIA	54
43	1	17	25	40	30	3	159	31	10	5	27	14	13	3	103	221	483	1029	WEST VIRGINIA	55
108	8	58	97	154	46	12	483	174	101	22	43	15	65	20	440	367	1290	2247	NORTH CAROLINA	56
39	3	26	23	57	16	3	167	106	41	5	16	3	27	12	210	165	542	1063	SOUTH CAROLINA	57
67	2	37	44	78	26	6	260	87	61	20	20	15	36	20	259	248	767	1483	GEORGIA	58
116	4	27	39	48	24	5	263	53	35	9	27	7	8	8	147	199	609	1137	FLORIDA	59
745	38	270	463	780	332	52	2680	789	546	258	223	88	630	157	2691	1978	7349	13571	TOTAL SOUTH ATLANTIC	
94	6	21	84	67	44	5	321	91	43	22	39	15	51	11	272	339	932	1687	KENTUCKY	61
108	5	38	74	112	31	18	386	168	55	21	46	12	45	17	364	488	1238	1947	TENNESSEE	62
57		21	40	73	32	4	227	75	27	11	18	23	17	10	181	335	743	1286	ALABAMA	63
37		15	33	48	16	1	150	36	19	2	8	8	12	7	92	143	385	752	MISSISSIPPI	64
296	11	95	231	300	123	28	1084	370	144	56	111	58	125	45	909	1305	3298	5672	TOTAL EAST S CENTRAL	
31		12	42	43	11	4	143	46	4	3	16	15	9	15	108	202	453	799	ARKANSAS	71
78	2	40	39	44	19	14	236	65	38	10	49	27	5	18	212	214	662	1363	LOUISIANA	72
90	5	25	64	74	33	12	303	63	25	13	49	21	26	15	212	476	991	1775	OKLAHOMA	73
230	16	81	216	255	104	21	923	268	131	38	114	99	73	54	777	917	2617	4772	TEXAS	74
429	23	158	361	416	167	51	1605	442	198	64	228	162	113	102	1309	1809	4723	8709	TOTAL WEST S CENTRAL	
19	5	5	18	14	5		66	9	7	2	9	4	3	8	42	65	173	632	MONTANA	81
20		4	12	8	8	2	54	10	8	2	12	5	3	2	42	87	183	476	IDAHO	82
11	1	4	11	6	4		37	6	1		2	1	1	1	12	36	85	207	WYOMING	83
143	18	35	77	57	35	19	384	74	39	11	69	24	14	14	245	420	1049	2051	COLORADO	84
22	36	5	2	12	9	3	89	15	13	2	10	2		3	45	54	188	359	NEW MEXICO	85
30	24	2	14	14	7	6	97	10	10	5	16	2	5	3	51	91	239	465	ARIZONA	86
124	13	68	84	37	58	16	400	52	42	5	76	40	10	14	239	309	948	2125	UTAH	87
6		1	9	7			23	1	2		1	3		1	8	13	44	93	NEVADA	88
375	97	124	227	155	126	46	1150	177	122	27	195	81	36	46	684	1075	2909	6408	TOTAL MOUNTAIN	
151	20	66	126	111	75	39	588	118	77	43	76	33	22	27	396	439	1423	2733	WASHINGTON	91
107	12	35	77	76	45	5	357	57	35	17	28	8	28	14	187	316	860	1769	OREGON	92
807	126	171	373	564	343	88	2472	321	305	158	258	69	123	47	1281	1507	5260	10497	CALIFORNIA	93
1	3						4	1	1						2		6	18	ALASKA	94
5	5	3	4	6	5	1	29	3	4	1	3	1	1		13	24	66	153	HAWAII	95
10	2	7	8	4	3	2	36		7	2	3	2		2	16	44	96	196	PUERTO RICO	98
1081	168	282	588	761	471	135	3486	500	429	221	368	113	174	90	1895	2330	7711	15366	TOTAL PACIFIC	
38	5	25	62	48	34	10	222	40	81	37	110	34	33	10	345	129	696	984	UNKN	
10667	1040	2963	5961	7124	3570	1129	32454	6997	5148	2331	4209	1591	2654	1306	24236	25314	82004	156752	GRAND TOTAL	

Time Trends in Baccalaureate Origins

In the graphs and tables on the preceding pages, it is evident that the South generally has been low as a source of first-level graduates who go on to the doctorate. There has been a change in this respect over the 42-year period, however, as shown in Table 10 (below right), and in Figure 10 (below left). The relative contributions of each area of the country to the total U.S. as a baccalaureate source of doctorates are shown in tabular and in graphic form. In this connection, it is interesting to compare Figure 10, baccalaureate origins, with Figure 7, doctorate origins. The shifts at the baccalaureate level came earlier, were less dramatic, and proceeded from a base of much less regional discrepancy than was true of the doctorate level over the period covered by this report.

Figure 10

REGIONAL VARIATIONS, BY DECADE, IN UNITED STATES BACCALAUREATE ORIGINS



More detailed data on foreign origins is found in Table 17, which lists the 80 leading foreign institutions of origin, and Appendix 11, which lists the foreign countries of origin, by decade, for the five major doctorate fields.

Table 10

PROPORTIONS OF U.S. BACCALAUREATE ORIGINS FROM EACH REGION, BY DECADE

	Percentage in region in each decade				
Region	1920-29	1930-39	1940-49	1950-59	1960-61
1. New England	13.1	11.3	10.1	10.1	10.7
2. Middle Atlantic	19.6	19.2	21.4	23.4	22.8
3. East North Central	26.4	25.2	23.6	21.9	22.2
4. West North Central	14.4	14.8	13.3	11.3	10.9
5. South Atlantic	9.8	8.9	9.1	8.5	8.2
6. East South Central	2.9	3.3	3.4	3.9	4.2
7. West South Central	3.3	4.5	5.1	6.2	6.7
8. Mountain	3.0	3.7	4.0	4.4	4.3
9. Pacific	7.5	9.1	10.0	10.3	10.0

An increasing proportion of U.S. doctorates come from abroad. Table 11 and Figure 11 depict in tabular and graphic form the variations over the past four decades, in the foreign origins of doctorates in the five general fields shown.

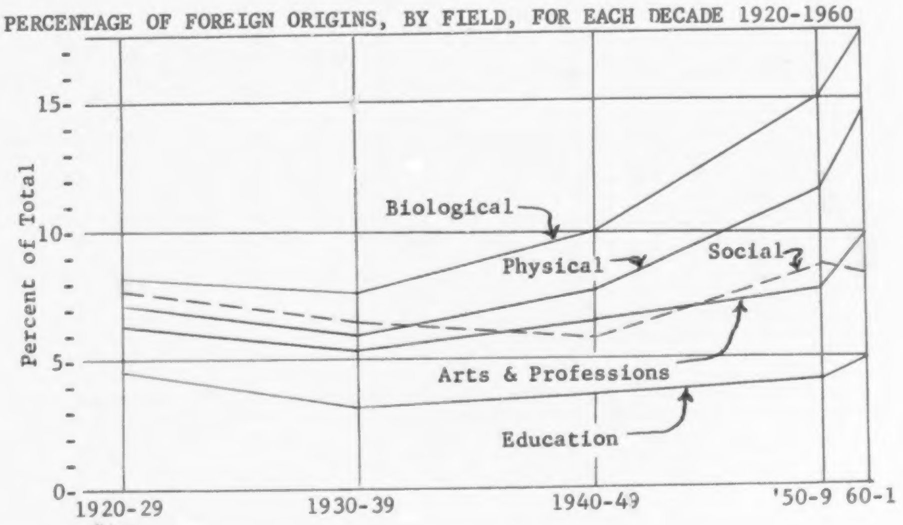
Table 11

PERCENTAGE OF FOREIGN ORIGINS OF DOCTORATES IN EACH FIELD, BY DECADE

General Field	1920-29	1930-39	1940-49	1950-59	1960-61
Physical Sciences	7.3	6.0	7.6	11.9	14.7
Biological Sciences	8.1	7.4	10.2	14.3	17.4
Social Sciences	6.3	5.5	6.4	7.8	9.9
Arts & Professions	7.6	6.4	5.9	8.4	8.3
Education	4.1	2.9	3.8	4.1	4.6
Total, All Fields	5.6	5.9	7.0	9.7	11.6

Figure 11

PERCENTAGE OF FOREIGN ORIGINS, BY FIELD, FOR EACH DECADE 1920-1960



Leading Schools of Baccalaureate Origin

During the early 1920's, the University of Chicago was not only the leading doctorate-granting institution, but also the leading undergraduate source of persons who later attained doctorate degrees, as is shown in Table 12. Later, other institutions came to the fore, with the percentage from the single leading source gradually declining from 2.82% of all doctorates in the 1920's to 1.85% in the most recent two-year period. A similar decline in the percentage from the second most populous source, and the third, fourth, and fifth, etc. is to be noted in this table, so that in the 1960's, the largest single source contributed, percentage-wise, only as much as the eighth largest source in the 1920's. This gradual diffusion in institutions of origin, paralleling in general the diffusion in doctorate origins noted in Chapter I, is shown graphically in Figure 12. Here it is to be noted that the leading 10 schools contributed 24% of all eventual doctorates in the earliest decade, but only 16.2% in the first two years of the 1960 decade. Similarly, the leading 100 schools declined, in percentage of all sources, from 71.1% to 58.7%, and the leading 200 schools from 86% to 74.6% over the 42-year period here described. This change is clearly due to the fact that as time has gone on, more and more undergraduate schools have produced people who have gone on to the doctorate degree, the total number of such schools in the United States being 1340 for the entire 1920-1962 year period. For the period 1936-1956, described in Publication 582 of the National Academy of Sciences--National Research Council, there were only 1177 institutions of baccalaureate origin listed.

Table 12

LEADING FORTY BACCALAUREATE ORIGINS INSTITUTIONS IN EACH DECADE OF DOCTORATE PRODUCTION 1920-1961

Rank Order	1920-1929 Baccalaureate Source	% of All Sources	1930-1939 Baccalaureate Source	% of All Sources	1940-1949 Baccalaureate Source	% of All Sources	1950-1959 Baccalaureate Source	% of All Sources	1960-1961 Baccalaureate Source	% of All Sources
1	Chicago	2.82	Wisconsin	2.33	Berkeley	2.48	Berkeley	2.24	CCNY	1.85
2	Wisconsin	2.76	Berkeley	2.25	Illinois	2.12	CCNY	2.20	Berkeley	1.73
3	Cornell	2.51	Illinois	2.10	Chicago	2.03	Chicago	1.66	Illinois	1.71
4	Illinois	2.30	Chicago	1.90	CCNY	2.00	Illinois	1.65	Harvard	1.38
5	Berkeley	2.20	Harvard	1.80	Minnesota	1.93	Harvard	1.61	Michigan	1.32
6	Harvard	2.09	Columbia	1.76	Wisconsin	1.74	Wisconsin	1.58	Wisconsin	1.30
7	Michigan	2.04	Michigan	1.76	Harvard	1.72	N.Y.U.	1.44	N.Y.U.	1.25
8	Columbia	1.82	Minnesota	1.72	Columbia	1.65	Michigan	1.35	Minnesota	1.24
9	Ohio State	1.58	Cornell	1.65	Michigan	1.36	Minnesota	1.34	Brooklyn Coll.	1.24
10	Yale	1.58	Ohio State	1.41	Ohio State	1.26	Columbia	1.29	UCLA	1.23
11	Minnesota	1.49	CCNY	1.25	N.Y.U.	1.23	Brooklyn Coll.	1.20	Cornell	1.19
12	U. of Penn.	1.35	Yale	1.23	Cornell	1.16	UCLA	1.13	Columbia	1.11
13	Indiana U.	1.28	U. of Wash.	1.16	Catholic	1.08	Cornell	1.12	Chicago	1.11
14	Iowa	1.27	U. of Penn.	1.11	UCLA	1.03	Ohio State	1.07	MIT	1.11
15	Stanford	1.12	N.Y.U.	1.06	U. of Wash.	.99	MIT	.94	Yale	1.02
16	Johns Hop.	1.11	Stanford	1.04	Yale	.96	Yale	.89	Ohio State	.92
17	Missouri	1.04	Texas	.99	Penn. St.	.93	Texas	.86	Penn. St.	.82
18	CCNY	1.01	Iowa	.98	MIT	.85	Penn. St.	.85	Purdue	.80
19	U. of Wash.	.98	Missouri	.94	U. of Penn.	.83	U. of Wash.	.83	Texas	.69
20	Princeton	.98	Oberlin	.91	Princeton	.80	Purdue	.78	U. of Wash.	.67
21	Oberlin	.90	Nebraska	.87	Oberlin	.80	Northwestern	.71	Mich. St.	.63
22	Kansas U.	.89	Penn. St.	.82	Stanford	.75	Rutgers	.68	U. of Penn.	.59
23	Nebraska U.	.86	Princeton	.80	Texas	.74	Stanford	.67	Missouri	.59
24	Texas U.	.85	Indiana	.78	Nebraska	.72	Iowa St.	.65	Iowa St.	.57
25	Catholic	.82	MIT	.77	Iowa	.71	U. of Penn.	.64	Utah	.57
26	Brown	.79	Northwestern	.73	Northwestern	.67	Iowa	.63	Princeton	.56
27	Penn. St.	.63	Pittsburgh	.70	Brooklyn Coll.	.64	Mich. St.	.61	Northwestern	.55
28	U. of N. Car.	.61	Kansas	.70	Missouri	.63	Syracuse	.60	Rutgers	.55
29	Vassar Coll.	.60	Iowa St.	.67	Pittsburgh	.63	Princeton	.57	Stanford	.54
30	Mt. Holyoke	.59	Johns Hop.	.65	Purdue	.62	U. of N. Car.	.56	Oberlin	.54
31	Northwestern	.58	Dartmouth	.63	Iowa St.	.62	Utah	.54	U. of N. Car.	.52
32	MIT	.57	Catholic	.60	Utah	.54	Oberlin	.54	Nebraska	.52
33	Dartmouth	.55	Syracuse	.56	Dartmouth	.54	Nebraska	.54	Syracuse	.50
34	U. of Va.	.55	Ohio Wes. U.	.52	Indiana	.53	Missouri	.53	Iowa	.49
35	Syracuse	.54	U. of N. Car.	.51	Rutgers	.52	Indiana	.53	Wayne St.	.46
36	Wellesley	.54	Brown	.50	Kansas	.51	Pittsburgh	.51	Indiana	.45
37	Smith Coll.	.50	Depauw	.49	Johns Hop.	.51	Wayne St.	.48	Okla. St. U.	.45
38	N.Y.U.	.49	Cal. Tech.	.48	U. of N. Car.	.49	Kansas	.48	Brig. Young	.42
39	Ohio Wes. U.	.48	UCLA	.46	Depauw	.47	Cal. Tech.	.47	U. of Roch.	.39
40	Wesleyan U.	.45	Wesleyan U.	.45	Syracuse	.42	U. of Fla.	.44	Cal. Tech.	.38

Diffusion of Baccalaureate Origins

In Chapter I it was seen that the relative concentration of doctorate degree-granting has been decreasing steadily over the past 40 years, as more and more institutions add graduate schools. It was seen earlier in this chapter that the geographic concentration of baccalaureate sources has also been declining. It is therefore interesting to examine the question of the relative importance of the leading baccalaureate sources, particularly in light of the great increase in the undergraduate enrollments of the great state universities. In Table 13 and in Figure 12 the necessary data are presented, showing the proportion of United States baccalaureate sources represented by the leading 10, the leading 20, 40, 100, and 200 undergraduate institutions of origin, over the past 42 years. It is evident that there has been a steady diffusion of first-level degrees. It should be noted, too, that these data represent only the relative dispersion among United States origins; the proportion of foreign origins, as has been shown, has been increasing over the same period. If these data had been calculated for all sources of undergraduate degrees, the decline in the proportion contributed by any given number of leading schools would have been slightly greater.

Figure 12

Diffusion of Baccalaureate Origins

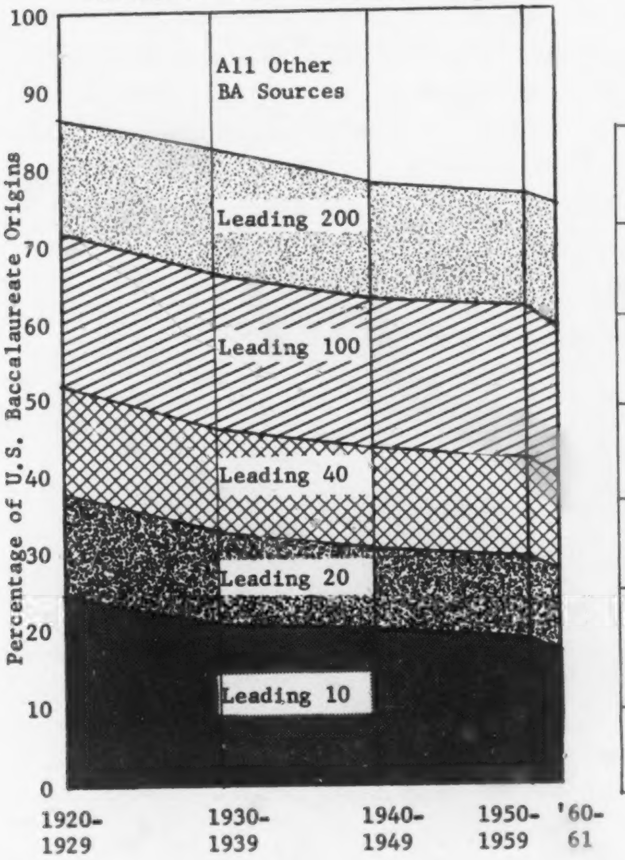


Table 13

FORTY-YEAR TREND IN BACCALAUREATE ORIGINS
IN LEADING UNDERGRADUATE INSTITUTIONS

	Decade of Doctorate				
	1920-29	1930-39	1940-49	1950-59	1960-61
10 Leading Schools	2578 24.0%	4794 20.2%	5537 19.5%	13,558 18.1%	2965 16.2%
20 Leading Schools	3961 36.9%	7539 31.8%	8525 30.1%	21,571 28.9%	4929 26.9%
40 Leading Schools	5480 51.1%	10,791 45.5%	12,181 43.0%	30,997 41.5%	7070 38.7%
100 Leading Schools	7624 71.1%	15,550 65.6%	17,588 62.1%	45,574 61.0%	10,741 58.7%
200 Leading Schools	9225 86.0%	19,391 81.8%	21,924 77.4%	56,897 76.1%	13,648 74.6%
All Other Baccalaureate Sources	1496 14.0%	4298 18.1%	6401 22.6%	17,846 23.9%	4642 25.4%
Total, US Origins	10,721 100%	23,689 100%	28,325 100%	74,743 100%	18,290 100%

Table 14 shows the major baccalaureate sources for the nation's 40 largest doctorate-granting institutions. In each case, the single largest undergraduate source was the doctorate institution itself. The total number of doctorates, the percent from the same institution, and the number and percent from the next largest source is shown in Table 14 for each of the 40 largest schools. The final line shows the accumulated data for all 40, who in total graduated 140,669 doctorates, 20.1 percent of whom had taken their first and third degrees from the same institution, while 3.5 percent on the average received their baccalaureate degrees from the next largest source.

Guide to the Appendix: Further Baccalaureate Origins Data

A number of additional tables, too bulky for this chapter, are included in the Appendix. These tables provide information in greater detail and for more institutions than is possible in the main body of the book. Appendix 4 gives data on all U.S. undergraduate sources of doctorates, combining all 42 years of doctorate production, and presenting the data by ten fields of eventual doctorate degrees. Appendix 5 presents data on the leading 299 baccalaureate source institutions (those which had 100 or more alumni in the study) by decade of doctorate. It thus provides an opportunity to study time trends for these leading source schools, and gives a break-out into the five major fields for each doctorate decade. (It is important to recognize

Table 14

CHIEF BACCALAUREATE SOURCES FOR 40 LEADING DOCTORATE-PRODUCING INSTITUTIONS

Doctorate Institutions In Order of Size	Total Doctorates Granted 1920-61	Number of BA's From Same Institutions	Percentage of BA's From Same Institutions	Next Largest Baccalaureate Source	Number of BA's From 2nd Source	Percentage of BA's From 2nd Source	Doctorate Institutions In Order of Size	Total Doctorates Granted 1920-61	Number of BA's From Same Institutions	Percentage of BA's From Same Institutions	Next Largest Baccalaureate Source	Number of BA's From 2nd Source	Percentage of BA's From 2nd Source
1 Columbia	12539	1405	11.2	C C N Y	830	6.6	21 Indiana U	2498	378	15.1	Ind S T C	74	3.0
2 U Wisc	7831	1725	22.0	Illinois	185	2.4	22 Princeton	2458	400	16.3	Harvard	57	2.3
3 Harvard	7638	1465	19.2	Yale	126	1.6	23 U Texas	2450	681	27.8	N Tex St U	125	5.1
4 Chicago	7392	1735	23.5	Illinois	123	1.7	24 Penn St U	2259	435	19.3	Illinois	39	1.7
5 Illinois	6307	1193	18.9	Chicago	95	1.5	25 Catholic U	2250	727	32.3	Notre Dame	36	1.6
6 Berkeley	6273	2131	40.0	U C L A	201	3.2	26 Pittsburgh	2242	533	23.8	Penn St U	63	2.8
7 Cornell	5835	968	16.6	Illinois	132	2.3	27 U So Cal	2090	275	13.2	U C L A	187	8.9
8 N Y U	5592	1047	18.7	C C N Y	719	12.8	28 U N Carolina	1951	308	15.8	Wake Forest	46	2.4
9 Michigan	5566	1311	23.6	Wayne St U	169	3.0	29 U C L A	1855	674	36.3	Berkeley	108	5.8
10 Ohio St U	5405	1085	20.1	Miami Ohio	110	2.0	30 U Wash	1719	541	31.5	Berkeley	42	2.4
11 Yale	5271	902	17.1	Harvard	92	1.7	31 Mich St U	1704	281	16.5	Michigan U	30	1.8
12 Minnesota	4831	1328	27.5	Wisconsin	89	1.8	32 Missouri	1427	348	24.4	Cen Mo St C	70	4.9
13 Iowa	3944	667	16.9	Iowa St	138	3.5	33 Cal Tech	1409	326	23.1	Berkeley	58	4.1
14 Stanford	3586	613	17.1	Berkeley	183	5.1	34 Fordham	1365	278	20.4	C C N Y	58	4.2
15 M I T	3379	814	24.1	Harvard	77	2.3	35 Boston	1337	208	15.6	Harvard	52	3.9
16 U Penn	3336	733	22.0	Temple	139	4.2	36 Duke	1331	127	9.5	C C N Y	37	2.8
17 Hopkins	3028	505	16.7	Goucher C	60	2.0	37 Maryland	1301	231	17.8	C C N Y	38	2.9
18 Purdue	2854	491	17.2	Illinois	59	2.1	38 Rutgers	1113	233	20.9	C C N Y	29	2.6
19 Northwestern	2676	350	13.1	Illinois	102	3.8	39 Syracuse	1064	250	23.5	C C N Y	26	2.4
20 Iowa St (Sci & Tech)	2520	400	15.9	Kans St U (tie)	52	2.1	40 Nebraska	1043	212	20.3	Neb Wesleyan	52	5.0
				Illinois	52	2.1	GRAND TOTAL	140669	28314	20.1	(omitting tie)	4886	3.5

that the arrangement is by date of doctorate rather than baccalaureate degree. The latter can never be a complete table, as additional persons from any baccalaureate year may turn up at the doctorate level at any time, whereas the doctorate year is definitive for these purposes.)

Appendix 6 presents a 29-field break-out for these same 299 source schools, combining on one line all 42 years of doctorate production. Finally for these same 299 schools, the 40 largest doctorate-granting institutions are given in Appendix 7. The same table can, of course, be read as providing the 299 leading U.S. baccalaureate sources for the leading 40 doctorate-granting institutions.

A comprehensive account of the geographic origins, by state and region, is provided for the 40 leading doctorate institutions in Appendix 8. The next table, Appendix 9, is comprehensive as to both BA and PhD, giving states and regions of baccalaureate for all states and regions of doctorate, for each decade of doctorate. Time trends in geographic migration from undergraduate to graduate school may thus be traced through the decade entries of this table. As a final note on U.S. baccalaureate sources, all institutions have been classified as to type, using the classifications of the Higher Education Directory, 1962, of the U.S. Office of Education. As many institutions change classification over time, while the classification here used is static, the data of this table, giving baccalaureate origins by classification of institution by decade, cannot reflect the classification at the time the bachelor's degree was granted. While this is a significant limitation, the table may nevertheless be of interest for some purposes, and is presented as Appendix 10 without further comment. Appendix 11 lists the foreign countries of baccalaureate origin.

The Relation of Baccalaureate to Doctorate Field: Sources and Destinations

Although most people who attain the doctorate do so in the same field in which they majored as undergraduates, this is not universal. We may therefore speak of "source fields" when considering fields of undergraduate major for those who eventually specialize in any given doctorate field. Likewise, proceeding from the undergraduate to the graduate level, we may think of the various eventual doctorate fields as "destination fields". Taking only the five most general fields, and considering both "sources" and "destinations", we obtain the data of Table 15 for the doctorates of 1957-61. In this table, the fields of undergraduate major are shown in the rows, while fields of doctorate are shown in the columns. The cells where rows and columns intersect show, in the upper left corner, the number of people who remained in the same general field for both baccalaureate and doctorate degrees. Below and alongside each of these numbers of cases are percentages: the percentage to the right shows the "destination" percentage for all those whose undergraduate majors were in a given row. The percentage figures shown below the actual number of cases represent the "source" percentages for all those whose eventual field of doctorate was in that column. Thus in Row 1, Column 1, there are 13,216 people whose undergraduate majors were in the physical sciences. This represents 84.3% of all undergraduate majors in physical sciences and 94.2% of all doctorate majors in physical sciences. Moving along the row, the next cell shows 1238 persons whose undergraduate majors were in physical sciences (7.9% of all such majors) but whose doctorate degrees were in the bio-science fields. These same 1238 cases represent 15.1% of all bio-science doctorates: thus the physical science fields were the "source field" for 15.1% of the bio-science majors, while the bio-sciences were the "destination fields" for 7.9% of all physical science undergraduate majors.

Table 15

FIELDS OF ORIGIN AND DESTINATION FOR THE DOCTORATES OF 1957-1961

Doctorate Fields: Destinations

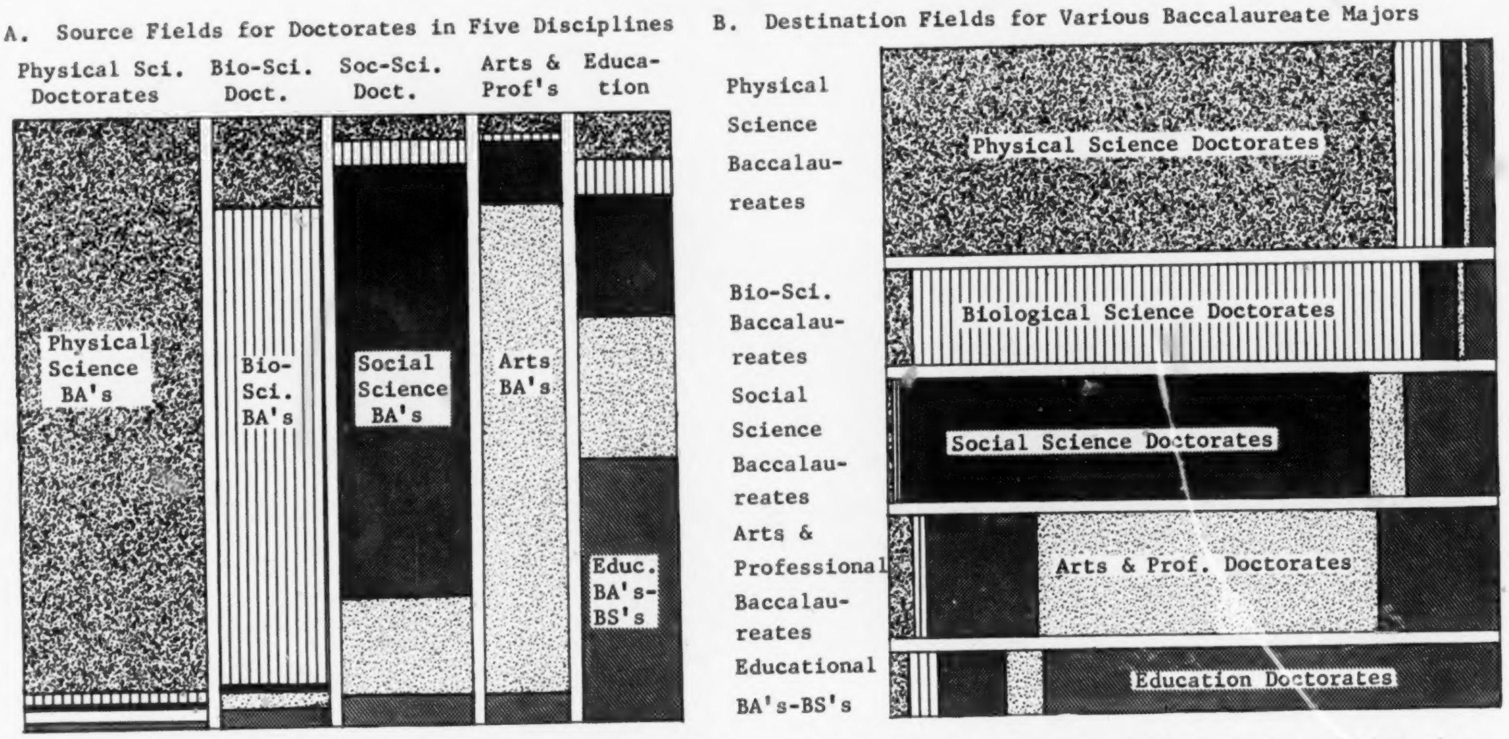
Baccalaureate Fields: Sources	Physical Sciences	Biological Sciences	Social Sciences	Arts and Professions	Education	Total	
Physical Sciences	13216 84.3% 94.2%	1238 7.9% 15.1%	398 2.5% 4.0%	234 1.5% 3.6%	597 3.8% 7.7%	15683	100%
Biological Sciences	322 4.3% 2.3%	6329 84.6% 77.1%	382 5.1% 3.9%	70 .9% 1.1%	381 5.1% 5.0%	7484	100%
Social Sciences	50 .5% .4%	94 1.0% 1.1%	7023 75.6% 70.8%	642 6.9% 9.8%	1477 15.9% 19.2%	9286	100%
Arts and Professions	326 3.4% 2.3%	294 3.1% 3.6%	1646 17.4% 16.6%	5326 56.4% 81.2%	1858 19.7% 24.1%	9450	100%
Education	120 2.7% .9%	249 5.5% 3.0%	468 10.4% 4.7%	283 6.3% 4.3%	3392 75.2% 44.0%	4512	100%
Total	14034	8204	9917	6555	7705	46415	
	100%	100%	100%	100%	100%		

Read percentages down to evaluate sources for a given doctorate field.
Read percentages across to evaluate doctorate destinations for a given major.

These data are shown graphically in Figure 13. Part A of this figure shows the undergraduate source fields for each major doctorate field, while Part B shows the graduate destination fields for each field of undergraduate major, for all those people who attained doctorate degrees from 1957 through 1961, inclusive. A more detailed analysis of fields of origin and destination is given in Appendix 12, where, for each of the 29 fields shown in the typical categories used in this book, these "source" percentages are shown in the next-to-bottom row, and the "destination" percentages are shown in the bottom row.

Figure 13

"SOURCES" AND "DESTINATIONS" AMONG FIVE MAJOR FIELD GROUPS



Width of bar shows relative size of the doctorate field.

Height of a given portion of the bar indicates the relative size of a baccalaureate source field in that column. In each major discipline, the principal source field is the same as the field of doctorate.

The thickness of the bar indicates the relative size of the baccalaureate field, for the eventual doctorate holders.

Length of a given portion of a bar indicates the relative size of various destination fields for those with a given undergraduate major.

Excess and Deficiency Fields

Some fields are more common as sources, (e.g. mathematics) and others as destinations (e.g. geo-sciences). It is interesting to compute a ratio for each field, showing its relationship to the others on a source-vs-destination basis. When we compute such ratios, with sources in the numerator and destinations in the denominator, we obtain the data shown in Table 16. A great many reasons may be adduced to account for these ratios, including the rigor of training required in the undergraduate and graduate levels, the percentage of all undergraduates in a given field who go on to doctorate degrees, the degree of specialization normally found at the undergraduate level, variations in academic aptitude, the degree of relatedness of two similar fields, etc. Our data are insufficient to permit a statement as to the relative importance of these various factors, and may best be considered as starting-points for hypotheses which may be investigated through other avenues of research.

Table 16

"SOURCE FIELD" PERCENTAGES: EXCESSES AND DEFICIENCIES

Mathematics	1.31	Psychology	.76
Physics	1.00	Anthrop.-Archeol.	.55
Chemistry	1.18	Sociology	.91
Geo-Sciences	.81	Economics	.82
Engineering	1.14	History	1.36
PHY. SCI. TOTAL	1.12	Pol.Sci.-Pub. Admin.	.87
Agric. Sciences	1.60	Soc. Sci., Misc.	1.79
Medical Sciences	2.27	SOC. SCIENCE TOTAL	.94
Physiol. & Related	.07	English Lang. & Lit.	1.60
Biochemistry	.13	Foreign Lang. & Lit.	1.25
Botany-Phytopathol.	.59	Philosophy	1.70
Microbiology	.38	Arts., Misc.	1.62
Zoology & Entomol.	.97	Business Admin.	1.51
Bio-Sci., Misc.	2.29	Religion, Theology	.50
BIO-SCIENCE TOTAL	.91	Professions, Misc.	1.58
EDUCATION	.59	ARTS & PROFESSIONS	1.44

Table 17

EIGHTY LEADING FOREIGN BACCALAUREATE SOURCES, 1920-1961 COMBINED

	Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
UNIV OF BRITISH COLUMBIA 01AI CANADA	298	201	112	55	37	703
UNIVERSITY OF TORONTO 01CU CANADA	193	139	150	153	29	664
UNIVERSITY OF ALBERTA 01AC CANADA	192	162	40	28	57	479
MCGILL UNIVERSITY 01BG CANADA	135	122	92	64	18	431
CAIRO UNIVERSITY 00FD EGYPT	103	171	48	30	32	384
UNIV OF SASKATCHEWAN 01CP CANADA	117	145	49	24	32	367
UNIVERSITY OF MANITOBA 01BC CANADA	124	117	42	36	28	347
QUEENS UNIVERSITY 01BZ CANADA	163	43	55	38	8	307
UNIVERSITY OF BOMBAY 07BH INDIA	96	99	33	13	14	255
UNIV OF THE PHILIPPINES 09CJ THE PHILIPPINES	49	99	36	21	44	249
NATIONAL CENTRAL UNIV 08CS CHINA	116	56	17	6	8	203
CHIAO-TUNG UNIVERSITY 08CL CHINA	178		9	5		192
UNIVERSITY OF LONDON 03AI ENGLAND	62	20	57	38	13	190
UNIVERSITY OF MADRAS 07BV INDIA	77	58	20	14	16	185
UNIV OF WESTERN ONTARIO 01DF CANADA	49	33	45	40	10	177
AMERICAN UNIV OF BEIRUT 07HB LEBANON	58	33	46	19	17	173
NATIONAL TAIWAN UNIV 08CO CHINA	122	26	16	2		166
CALCUTTA UNIVERSITY 07BI INDIA	77	43	26	2	5	153
ONTARIO AGRICULTURAL COL 01BP CANADA	9	135	6	1	2	153
TSINGHUA UNIVERSITY 08EH CHINA	96	23	23	7		149
UNIVERSITY OF THE PANJAB 07KA PAKISTAN	32	59	30	8	13	142
MCMASTER UNIVERSITY 01BH CANADA	47	26	22	35	11	141
CAMBRIDGE UNIVERSITY 03AC ENGLAND	54	25	30	26	2	137
OXFORD UNIVERSITY 03AL ENGLAND	29	7	49	45	4	134
UNIVERSITY OF PARIS 05CW FRANCE	36	6	22	60	3	127
AGRA UNIVERSITY 07BA INDIA	16	77	17	6	4	120
ACADIA UNIVERSITY 01AA CANADA	36	34	23	16	8	117
NANKING UNIVERSITY 08DL CHINA	26	57	16	11	6	116
BANARAS HINDU UNIVERSITY 07BF INDIA	71	33	4	2	4	114
HEBREW UNIVERSITY 07GB ISRAEL	35	17	35	18	8	113
DALHOUSIE UNIVERSITY 01AL CANADA	36	16	14	33	8	107
YENCHING UNIVERSITY 08EL CHINA	28	24	36	11	8	107
UNIVERSITY OF TOKYO 08HT JAPAN	60	20	11	7	6	104
ST JOHNS UNIVERSITY 08CX CHINA	39	16	28	12	5	100
UNIVERSITY OF SYDNEY 09AG AUSTRALIA	21	37	20	7	15	100
SEOUL NATIONAL UNIV 08JD KOREA	50	18	9	6	8	91
EAST PANJAB UNIVERSITY 07BK INDIA	22	39	12	2	10	85
UNIVERSITY OF MONTREAL 01BJ CANADA	15	32	16	16	4	83
UNIVERSITY OF TEHERAN 07EC IRAN	25	11	29	7	11	83
ALEXANDRIA UNIVERSITY 00FC EGYPT	31	20	17	8	3	79
UNIVERSITY OF MYSORE 07BW INDIA	33	35	4	2	4	78
UNIVERSITY OF VIENNA 04AN AUSTRIA	8	10	29	22	4	73
CHEKIANG UNIVERSITY 08CJ CHINA	51	17	4			72
UNIVERSITY OF DELHI 07BJ INDIA	40	7	12	6	4	69
LAVAL UNIVERSITY 01AY CANADA	12	37	10	8		67
SWISS FED INST OF TECH 05JH SWITZERLAND	52	14	1			67
HIGH TEACH TRAINING COLL 07FD IRAQ	15	17	16	3	13	64
MOUNT ALLISON UNIVERSITY 01BK CANADA	28	1	5	11	17	62
UNIVERSITY OF ALLAHABAD 07BC INDIA	12	29	14	3	3	61
CHULALONGKORN UNIV 08LB THAILAND	17	11	4	3	25	60
ANDHRA UNIVERSITY 07BD INDIA	29	10	10	7	2	58
UNIV OF NEW ZEALAND 09CE NEW ZEALAND	16	22	14	3	3	58
ISRAEL INSTITUTE OF TECH 07GA ISRAEL	54			1		55
LUCKNOW UNIVERSITY 07BU INDIA	11	17	14	5	8	55
SOUTH-WEST ASSOC UNIV 08ED CHINA	36	7	8	3	1	55
PEKING UNIVERSITY 08CN CHINA	24	4	15	5	6	54
UNIV OF NEW BRUNSWICK 01BN CANADA	15	23	6	5	4	53
NA CAPODISTRIAN U ATHENS 06CF GREECE	17	7	11	12	5	52
ROBERT COLLEGE 07IJ TURKEY	31	3	8	9	1	52
LINGNAN UNIVERSITY 08CI CHINA	10	11	11	10	8	50
KYOTO UNIVERSITY 08HH JAPAN	23	15	5	5	1	49
UNIVERSITY OF SHANGHAI 08CY CHINA	20	8	12	2	7	49
UNIVERSITY OF MELBOURNE 09AC AUSTRALIA	14	11	9	9	6	49
UNIV OF STELLENBOSCH 00AK SOUTH AFRICA	13	22	8	2	3	48
PATNA UNIVERSITY 07BZ INDIA	9	16	14	4	1	44
AMERICAN UNIV AT CAIRO 00FA EGYPT	6	7	17	3	9	42
CHARLES UNIVERSITY 06BC CZECHOSLOVAKIA	5	8	17	11	1	42
SOOCHOW UNIVERSITY 08EC CHINA	11	15	5	11		42
UNIVERSITY OF OSLO 03IH NORWAY	10	15	8	7	1	41
CATHOLIC UNIV OF PEKING 08CG CHINA	18	6	9	3	2	38
UNIVERSITY OF DACCA 07KB PAKISTAN	9	22	4	2	1	38
UNIVERSITY OF QUEENSLAND 09AF AUSTRALIA	10	14	5	4	5	38
FUKIEN CHRISTIAN UNIV 08CW CHINA	7	14	6	5	4	36
LUD MAXIMILIAN U MUNICH 04CB GERMANY	5	14	10	6	1	36
U OF ST FRANCIS XAVIER 01CF CANADA	18	4	5	2	7	36
U OF WESTERN AUSTRALIA 09AI AUSTRALIA	12	7	8	7	2	36
UNIVERSITY OF GLASGOW 03JC SCOTLAND	15	9	8	4		36
UNIVERSITY OF RANGOON 08AB BURMA	7	9	12	2	6	36
OSMANIA UNIVERSITY 07BY INDIA	13	14	5		1	33
UNIVERSITY OF CAPE TOWN 00AA SOUTH AFRICA	16	7	2	1	7	33
TOTAL	377[illegible]	2818	1727	1140	684	10144
% OF TOTAL FOREIGN IN LEADING 80 INSTITUTIONS	70.2	72.0	66.5	58.2	65.2	68.1

CHAPTER III

MIGRATION, EMPLOYMENT, AND PERSONAL CHARACTERISTICS

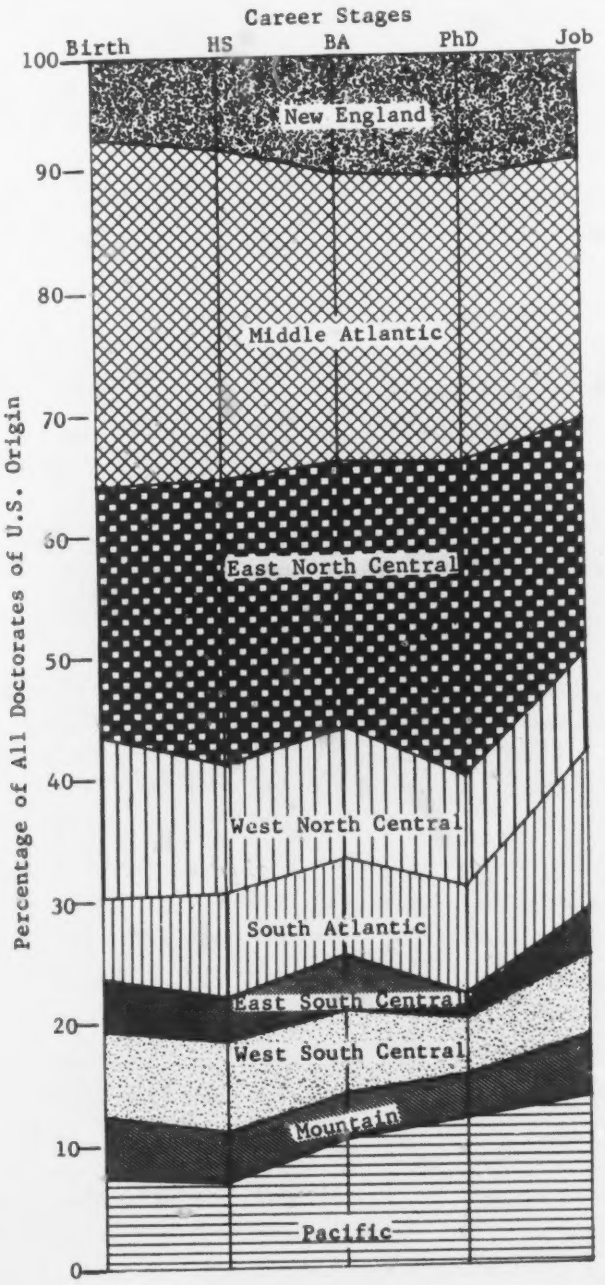
Migration From Birth to First Postdoctoral Job

Migration from undergraduate to graduate school has been described in Chapter II. A longer look at geographic migration is afforded by data available regarding the 1957-1961 doctorates. For these graduates we have date and place of birth and of high school graduation, and place of postdoctoral employment, as well as the information on higher education degrees. Table 18 shows the birth-to-job migration sequence for these people in ten doctorate fields. Figure 14 shows this geographic migration, for the United States origins only, as the inclusion of foreign areas at all but the doctorate level (which is by definition excluded) produces a graphic distortion. Table 19 shows the time trends, such as they are, for the period 1958 through 1961. (1957 was omitted because data were incomplete.) The upward trend in foreign origins, noted in the two previous chapters over a longer time span, is here visible for the four years 1958 through 1961 inclusive.

Examination of field differences with respect to the foreign category shows distinct trends. In the science fields there are high proportions of foreign-born and foreign-educated. This proportion drops sharply in the arts, psychology, and education--particularly the latter. The proportion with job commitments outside the U.S. at the time of graduation is particularly noteworthy. In mathematics, physics, chemistry, and engineering, these are less than half the proportion coming from foreign baccalaureate sources. And in all fields, the migration toward the U.S. for this United States doctorate group is apparent at each stage, from birth to secondary school, to undergraduate education, and finally to postdoctoral job.

Figure 14

GEOGRAPHIC MIGRATION WITHIN THE USA AT EACH CAREER STAGE, 1958-1961 DOCTORATES, ALL FIELDS



Within the United States, it must be recognized that the migration trends associated with education and professional employment for this group are superimposed on general mass movements affecting the whole population. Two such general trends are the rural-to-urban shift, which tends to drain the agricultural areas, and a marked growth in the Pacific coast population. Both of these trends have existed for several decades. A trend that affects particularly the professionally-educated segment of the population is the growth in the Washington, D.C. area, and it is reflected here in employment in the South Atlantic region far in excess of that region's contribution at the baccalaureate level, and beyond the doctorate level in all fields but mathematics.

Examining the regions within the United States, one notes that in seven of the ten major fields New England occupies a progressively larger proportion of the total U.S. doctorates at each successive career stage, up to the doctorate. (Three fields--bio-sciences, psychology, and education--show no great trend.) In six of the seven fields, there is a large drop for New England as the region of first postdoctoral job. Only in mathematics is the proportion employed in New England greater than the proportion graduating from high school there. For all fields combined, New England grants 50% more doctorates than high school diplomas to eventual doctorate-holders, yet the proportion of New England postdoctoral jobs is approximately equal to the high school origins. It is thus clear that while there is an in-migration to the undergraduate and graduate schools of this region, there is a compensating out-migration after receipt of the doctorate.

The East North Central region shows a pattern quite similar to that for New England, with a proportionate increase at the BA and PhD levels and a decline in postdoctoral employment. Although both East and West South Central regions lose people at the doctorate level, they regain them in postdoctoral employment.

Table 18

REGIONAL MIGRATION OF 1958-1961 DOCTORATES IN TEN FIELDS:
PERCENT IN EACH REGION AT EACH CAREER STAGE

	New England					Middle Atlantic					East North Central					West North Central				
Field of PhD	Birth	HS	BA	PhD	Job	Birth	HS	BA	PhD	Job	Birth	HS	BA	PhD	Job	Birth	HS	BA	PhD	Job
Mathematics	4.3	5.4	10.0	13.8	11.1	26.3	25.4	23.3	20.0	20.1	16.7	15.7	16.6	23.3	14.6	8.6	8.0	8.0	7.1	5.2
Physics	5.7	6.9	13.9	14.5	7.3	25.2	24.8	22.3	25.0	22.4	16.6	15.5	16.3	19.8	12.2	7.1	5.9	5.9	5.5	2.8
Chemistry	7.0	7.6	10.3	11.1	6.3	27.6	27.2	25.1	20.4	24.6	17.3	17.6	19.8	28.5	15.8	8.8	8.4	8.7	10.2	3.9
Earth Sciences	7.1	9.7	14.0	13.3	4.0	17.5	16.3	14.2	19.5	10.3	16.9	15.6	15.5	22.8	7.0	8.2	7.4	7.6	6.6	4.7
Engineering	4.0	4.8	9.3	14.2	6.7	21.7	21.9	20.9	22.4	23.7	17.5	17.5	19.9	31.8	15.5	8.1	7.0	6.5	6.8	4.1
Bio-Sciences	6.1	6.5	7.0	5.2	4.0	18.5	18.1	16.4	17.3	13.6	15.9	15.6	17.4	29.5	13.3	9.5	8.8	9.6	13.3	7.3
Psychology	7.0	7.5	7.8	8.4	8.1	33.8	34.0	30.4	26.4	22.0	17.9	17.9	20.7	26.8	18.0	9.5	8.6	9.4	8.7	7.1
Social Sciences	6.4	7.5	10.4	14.3	8.8	21.2	21.7	19.0	25.1	16.7	16.6	16.1	19.5	25.4	14.8	10.0	8.8	8.4	6.4	6.1
Arts & Professions	6.9	8.1	11.1	16.1	9.7	22.0	22.1	18.9	23.1	16.7	18.8	18.2	21.6	27.2	18.6	10.3	9.5	9.3	7.8	6.6
Education	6.6	6.7	6.8	6.0	5.1	20.4	20.7	19.4	29.7	17.9	19.1	19.3	20.3	20.3	14.9	14.8	13.9	13.5	9.0	8.4
All Fields	6.3	7.0	9.3	10.7	6.9	22.8	22.8	20.6	23.3	18.5	17.5	17.2	19.4	26.1	15.3	10.2	9.3	9.4	8.9	6.2
Total Number	2450	2744	3618	4176	2055	8887	8885	8022	9083	5499	6818	6714	7559	10172	4536	3969	3633	3660	3456	1843

	South Atlantic					East South Central					West South Central					Mountain				
Field of PhD	Birth	HS	BA	PhD	Job	Birth	HS	BA	PhD	Job	Birth	HS	BA	PhD	Job	Birth	HS	BA	PhD	Job
Mathematics	5.0	6.0	6.8	11.2	10.1	3.5	3.5	2.9	2.3	2.1	6.5	6.0	6.5	5.0	3.7	2.3	2.5	2.1	1.3	2.9
Physics	6.5	8.4	7.8	10.3	10.5	2.6	2.6	2.5	1.8	2.4	6.0	6.2	5.8	4.8	3.1	3.5	3.0	2.7	2.2	5.5
Chemistry	6.2	6.6	7.4	8.8	12.9	3.3	3.3	3.5	2.8	3.0	4.1	4.3	4.2	4.7	5.9	3.2	2.7	3.0	2.5	2.4
Earth Sciences	5.5	5.2	3.4	3.7	9.0	2.2	2.2	1.9	0.2	1.9	6.2	5.4	5.6	7.2	13.8	6.3	6.3	7.5	6.7	10.5
Engineering	4.9	5.5	6.1	5.5	7.2	1.9	1.9	1.4	0.4	2.0	4.6	4.7	4.8	3.2	5.2	3.5	3.6	3.5	2.3	4.0
Bio-Sciences	6.6	7.4	8.0	10.6	12.6	3.2	3.0	3.7	1.5	3.8	6.0	6.0	6.4	6.4	5.9	4.8	4.8	5.7	2.3	4.2
Psychology	4.8	5.5	6.2	7.3	8.4	2.6	2.5	2.9	2.8	2.9	4.4	4.3	4.4	6.0	4.5	2.9	2.8	3.4	3.8	2.7
Social Sciences	6.1	6.4	7.3	11.0	12.9	2.7	3.0	2.9	1.1	2.9	4.8	4.5	4.7	3.5	4.8	3.1	2.7	3.3	1.2	3.7
Arts & Professions	7.2	7.8	8.3	8.9	9.1	4.0	3.7	3.8	1.5	3.2	6.4	6.4	6.4	4.0	6.0	3.3	2.8	3.2	2.1	4.1
Education	7.2	7.4	8.0	6.0	9.6	5.3	5.1	5.7	4.4	3.8	7.8	7.8	8.1	6.0	6.1	4.4	4.2	4.7	6.3	5.0
All Fields	6.3	6.9	7.4	8.6	10.5	3.4	3.3	3.5	2.1	3.1	5.8	5.7	5.9	5.0	5.6	3.8	3.5	3.9	3.0	4.1
Total Number	2457	2687	2898	3358	3128	1337	1291	1378	817	929	2245	2228	2284	1948	1669	1467	1371	1536	1168	1223

	Pacific					Foreign				
Field of PhD	Birth	HS	BA	PhD	Job	Birth	HS	BA	PhD	Job
Mathematics	5.2	7.0	9.1	16.0	14.5	20.3	16.4	14.3	--	6.4
Physics	6.7	8.2	10.5	16.1	17.5	18.6	14.9	11.9	--	4.5
Chemistry	5.3	6.6	7.6	11.1	8.5	16.3	13.1	10.2	--	3.3
Earth Sciences	9.9	12.6	13.5	20.0	14.4	19.1	17.8	16.2	--	13.4
Engineering	4.6	5.6	6.9	13.3	13.3	28.5	25.5	20.4	--	5.8
Bio-Sciences	6.8	8.1	9.1	13.9	9.1	21.6	19.4	16.5	--	13.0
Psychology	5.4	7.7	9.9	9.7	11.2	10.6	6.6	4.7	--	2.7
Social Sciences	6.5	8.6	10.7	12.1	10.4	20.7	16.9	12.8	--	8.7
Arts & Professions	4.9	6.8	7.9	9.4	10.6	13.9	10.8	8.6	--	5.4
Education	6.0	7.5	9.0	12.4	12.9	7.5	5.7	4.6	--	4.3
All Fields	5.9	7.5	9.0	12.4	11.4	16.9	13.9	11.2	--	6.6
Total Number	2299	2944	3520	4841	3382	6586	5444	4382	--	1957

Table 18 includes the doctorates of 1958 through 1961, inclusive. The percentages shown are to be read across: the total for all regions for a given field will equal 100%. For region-by-region analysis, the field percentages at any given career stage may thus be compared directly. For example, in New England at the doctorate level the physical sciences, social sciences, and arts & professions fields are strong, and the bio-sciences, psychology, and education relatively weak, while the opposite is true for the West North Central region.

Table 19

REGIONAL DISTRIBUTION AT EACH CAREER STAGE, BY YEAR OF DOCTORATE, ALL FIELDS COMBINED

		Birth				Total	High School				Total	BA				Total
		1958	1959	1960	1961	58-61	1958	1959	1960	1961	58-61	1958	1959	1960	1961	58-61
Total		8840	9359	10000	10820	39019	8840	9359	10000	10820	39019	8840	9359	10000	10820	39019
New England	N	571	592	632	655	2450	627	670	707	740	2744	781	879	976	982	3618
	%	6.5	6.3	6.3	6.1	6.3	7.1	7.2	7.1	6.8	7.0	8.8	9.4	9.8	9.1	9.3
Middle Atlantic	N	2076	2202	2204	2405	8887	2058	2177	2211	2439	8885	1892	1944	1970	2216	8022
	%	23.5	23.5	22.0	22.2	22.8	23.3	23.3	22.1	22.5	22.8	21.4	20.8	19.7	20.5	20.6
E. North Central	N	1509	1664	1758	1887	6818	1423	1655	1729	1907	6714	1670	1828	1944	2117	7559
	%	17.1	17.8	17.6	17.4	17.5	16.1	17.7	17.3	17.6	17.2	18.9	19.5	19.4	19.6	19.4
W. North Central	N	889	909	993	1178	3969	804	843	920	1066	3633	809	862	940	1049	3660
	%	10.1	9.7	9.9	10.9	10.2	9.1	9.0	9.2	9.9	9.3	9.1	9.2	9.4	9.7	9.4
South Atlantic	N	590	553	644	670	2457	632	615	702	738	2687	724	677	737	760	2898
	%	6.7	5.9	6.4	6.2	6.3	7.1	6.6	7.0	6.8	6.9	8.2	7.2	7.4	7.0	7.4
E. South Central	N	282	330	339	386	1337	260	309	357	365	1291	297	318	379	384	1378
	%	3.2	3.5	3.4	3.6	3.4	2.9	3.3	3.6	3.4	3.3	3.4	3.4	3.8	3.5	3.5
W. South Central	N	543	526	566	610	2245	519	522	555	632	2228	532	530	581	641	2284
	%	6.1	5.6	5.7	5.6	5.8	5.9	5.6	5.6	5.8	5.7	6.0	5.7	5.8	5.9	5.9
Mountain	N	326	377	395	369	1467	310	348	353	360	1371	350	390	391	405	1536
	%	3.7	4.0	4.0	3.4	3.8	3.5	3.7	3.5	3.3	3.5	4.0	4.2	3.9	3.7	3.9
Pacific	N	567	532	618	582	2299	619	712	821	792	2944	855	832	923	910	3520
	%	6.4	5.7	6.2	5.4	5.9	7.0	7.6	8.2	7.3	7.5	9.7	8.9	9.2	8.4	9.0
Foreign	N	1370	1590	1725	1901	6586	1097	1329	1442	1576	5444	906	1067	1124	1285	4382
	%	15.5	17.0	17.3	17.6	16.9	12.4	14.2	14.4	14.5	13.9	10.2	11.4	11.2	11.9	11.2
Unknown	N	117	84	126	177	504	491	179	203	205	1078	24	32	35	71	162
	%	1.3	0.9	1.3	1.6	1.3	5.6	1.9	2.0	1.9	2.8	0.3	0.3	0.4	0.7	0.4

		PhD				Total	Job				Total
		1958	1959	1960	1961	58-61	1958	1959	1960	1961	58-61
Total		8840	9359	10000	10820	39019	6651	7350	7609	8090	29700
New England	N	929	1011	1114	1122	4176	433	524	539	559	2055
	%	10.5	10.8	11.1	10.4	10.7	6.5	7.1	7.1	6.9	6.9
Middle Atlantic	N	2098	2225	2273	2487	9083	1145	1374	1412	1568	5499
	%	23.7	23.8	22.7	23.0	23.3	17.2	18.7	18.6	19.4	18.5
E. North Central	N	2262	2438	2638	2834	10172	859	1139	1225	1313	4536
	%	25.6	26.0	26.4	26.2	26.1	12.9	15.5	16.1	16.2	15.3
W. North Central	N	775	833	910	938	3456	361	426	519	537	1843
	%	8.8	8.9	9.1	8.7	8.9	5.4	5.8	6.8	6.6	6.2
South Atlantic	N	788	802	835	933	3358	690	755	819	864	3128
	%	8.9	8.6	8.4	8.6	8.6	10.4	10.3	10.8	10.7	10.5
E. South Central	N	181	196	206	234	817	158	236	264	271	929
	%	2.0	2.1	2.1	2.2	2.1	2.4	3.2	3.5	3.3	3.1
W. South Central	N	458	473	465	552	1948	323	401	444	501	1669
	%	5.2	5.1	4.7	5.1	5.0	4.9	5.5	5.8	6.2	5.6
Mountain	N	243	262	293	370	1168	211	325	334	353	1223
	%	2.7	2.8	2.9	3.4	3.0	3.2	4.4	4.4	4.4	4.1
Pacific	N	1106	1119	1266	1350	4841	614	875	933	960	3382
	%	12.5	12.0	12.7	12.5	12.4	9.2	11.9	12.3	11.9	11.4
Foreign	N	--	--	--	--	--	380	473	508	596	1957
	%	--	--	--	--	--	5.7	6.4	6.7	7.4	6.6
Unknown	N	--	--	--	--	--	1477	822	612	568	3479
	%	--	--	--	--	--	22.2	11.2	8.0	7.0	11.7

Annual variations in data such as these may be expected to be minor. The more or less steady climb in the "Foreign" area, however, appears to be significant. The decline in the "Unknown" category of post-doctoral job location is clearly of statistical significance. Its causes and practical significance are not directly apparent, however.

The total number at the "job" stage is less than at earlier stages because many had no job commitments at the time the DOCTORATE SURVEY forms were completed.

Time Lapse Between Baccalaureate and Doctorate Degrees

For the period before 1957, the only information available with respect to doctorate-holders consisted of degrees held, their dates, and the institutions awarding them. Thus no data on ages are available. Reasonable inferences can be drawn, however, from data on the time lapse between the bachelor's and doctor's degrees, as age at baccalaureate is more nearly a constant than age at doctorate. The mean time lapse between first and third-level degrees for each decade, and for ten major fields is shown in Table 20 which also shows standard deviations and numbers of cases. The standard deviation is a measure of the dispersion or spread of individuals in a distribution, a quantitative measure of their tendency to deviate from the average. In a normal distribution, two-thirds of the cases will fall within a range of one standard deviation above and below the mean. In data such as these time lapses, there is a "positive skew" or tendency to much greater deviations above the mean than below the mean. Thus some individuals may take twenty years more than the average, but twenty years less would be an impossibility. For more detailed data on mean time lapse, by year of doctorate, for 29 fields, see Table 21. Figure 15 presents two-year moving averages of the BA-PhD time lapse for five major fields, from 1920 to 1961.

For the first two decades of the period covered here, there was a tendency for the mean time lapse for the various fields to diverge, the natural sciences remaining practically constant while the other fields increased rather steadily in mean time lapse. Individual differences, as indicated by the standard deviation, were relatively constant during this period in the natural sciences, but increased in the other fields. Thus some people in the social sciences, arts, and professions fields continued to complete their degrees in about the same time as before, but an increasing proportion of the students took longer. The onset of World War II resulted in an initial drop in both mean and standard deviation, perhaps because of the accelerated programs introduced at that time. Later, however, the time lapse increased markedly, due to time spent by the students in the armed services. As this student generation graduated, the time lapse dropped back to nearly pre-war levels for the science fields, including social sciences, but remained high for the arts and professional fields, including

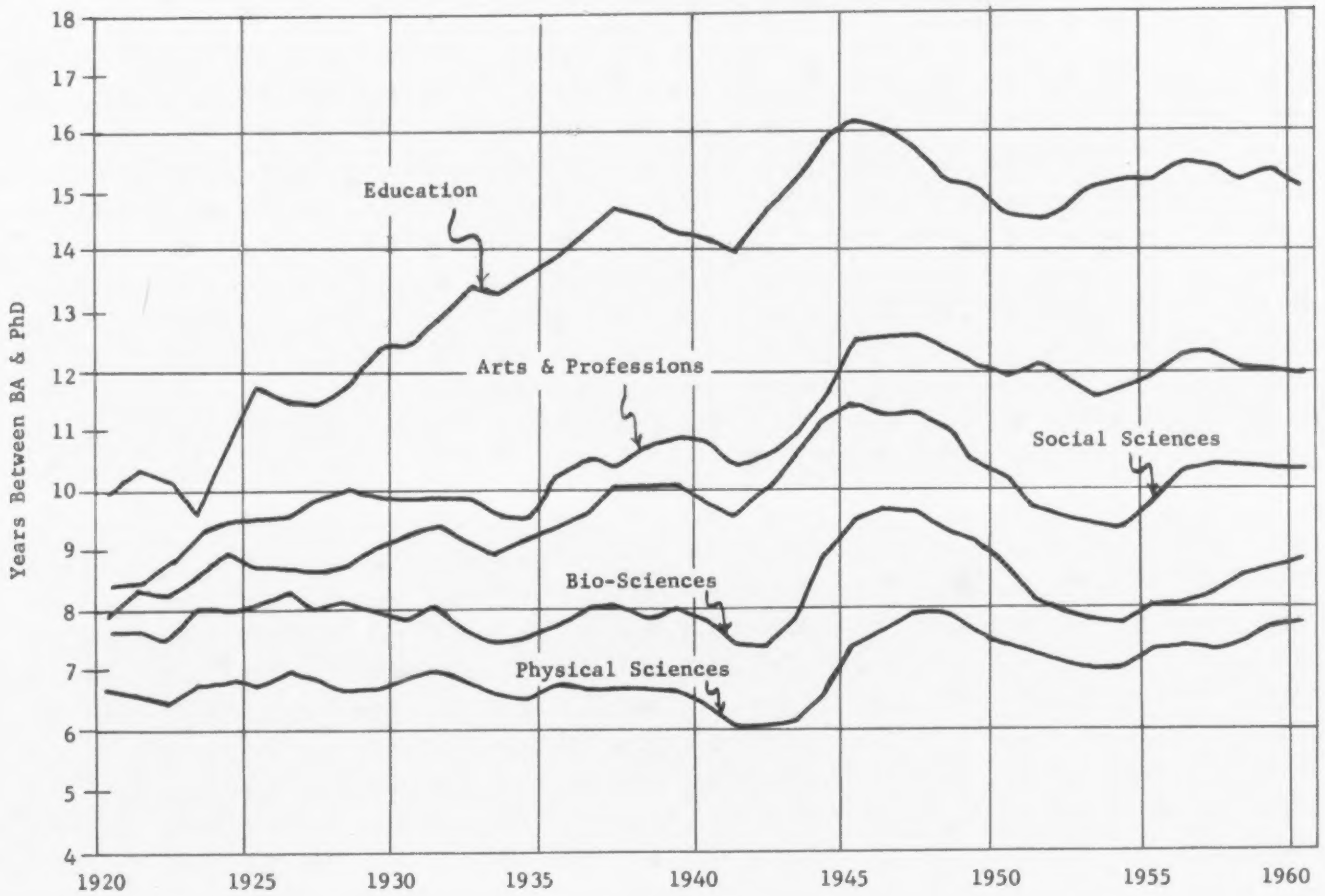
Table 20

TIME LAPSE BETWEEN BACCALAUREATE AND DOCTORATE DEGREES IN TEN FIELDS:
MEANS AND STANDARD DEVIATIONS FOR EACH DECADE 1920-1960

Period		Math	Phys.	Chem.	Geo-Sci.	Engr.	Tot. Phys. Sci.	Bio-Sci.	Tot. Nat. Sci.	Psych.	Soc.Sci. (other than Psych.)	Arts & Profs.	Educ.	S.S., A & P, & Educ.	Grand Total
1920-1929	Number	337	632	1902	326	219	3416	2257	5673	618	1837	2105	1064	5624	11297
	Mean	8.1	7.4	6.2	7.8	6.9	6.8	8.1	7.3	8.5	8.8	9.5	11.3	9.5	8.4
	S. D.	4.7	4.3	3.7	4.9	4.6	4.2	4.6	4.4	5.0	4.7	5.4	5.4	5.2	4.9
1930-1939	Number	774	1305	3917	604	780	7380	5006	12386	1116	3816	4633	2995	12560	24946
	Mean	7.7	7.1	6.2	7.8	7.4	6.8	7.9	7.2	8.2	9.9	10.2	13.8	10.8	9.0
	S. D.	4.9	4.1	3.8	4.6	4.9	4.2	4.6	4.4	5.2	5.4	5.8	6.5	6.1	5.6
1940-1949	Number	829	1469	5309	563	1406	9576	5853	15429	1233	4197	4755	4676	14861	30290
	Mean	8.3	7.5	6.3	8.9	8.1	7.1	8.5	7.6	9.0	11.1	11.6	15.2	12.4	10.0
	S. D.	4.9	3.9	3.5	4.3	4.3	3.9	4.6	4.2	5.2	5.8	6.2	6.3	6.4	5.9
1950-1959	Number	2317	4962	10221	1700	5923	25123	14880	40003	6403	11120	11098	13946	42567	82570
	Mean	8.3	7.4	6.6	8.1	8.1	7.4	8.3	7.7	8.5	10.8	12.0	15.2	12.2	10.0
	S. D.	4.8	3.6	3.5	4.6	4.2	4.0	4.6	4.2	5.1	5.9	6.4	6.9	6.7	6.1
1960-1961	Number	643	1160	2231	506	1826	6366	3563	9929	1622	2681	2984	3418	10705	20634
	Mean	8.5	7.6	7.0	8.6	8.3	7.8	8.9	8.2	9.4	11.0	12.0	15.2	12.4	10.3
	S. D.	4.8	3.4	3.5	4.5	4.4	4.0	4.4	4.2	5.2	5.9	6.3	7.1	6.7	6.0
1920-1961	Number	4900	9528	23580	3699	10154	51861	31559	83420	10992	23651	25575	26099	86317	169737
	Mean	8.2	7.4	6.5	8.2	8.0	7.2	8.3	7.6	8.7	10.6	11.4	14.9	11.9	9.8
	S. D.	4.8	3.7	3.6	4.6	4.3	4.0	4.6	4.3	5.2	5.7	6.2	6.8	6.5	5.9

Figure 15

MEAN BA-TO-PHD TIME LAPSE IN FIVE MAJOR FIELDS
(TWO-YEAR MOVING AVERAGE)



education. Finally, since the late 1950's, there has been a rise in the science fields coincident with a leveling off in the other fields, tending slightly toward a convergence of the five time-lapse lines, and, for the first two years of the 1960 decade, a decrease in standard deviation.

It is of particular interest to note that the rise in time lapse in the past decade in the sciences has occurred in spite of the massive growth of Federal fellowship programs which are designed to decrease time lapse, and which in fact do result in significant acceleration for those obtaining awards, as has been shown in research conducted in the Office of Scientific Personnel.* The reasons for the increase in time lapse are probably complex, and cannot be determined adequately from data available at present. Factors such as the increasing tendency of students to marry and acquire dependents prior to graduation have been involved in explanation. For the period since 1957, data on age and number of dependents have become available, and are described in the pages that follow. The probability seems very good, however, that customs and practices develop within particular fields, and perhaps within particular institutions or groups of institutions, that are also powerful determiners. This is suggested by the fact that the field of education, which consistently has the greatest time lapse, has a tradition of extensive on-the-job experience prior to enrollment for the doctorate, and, at the other end of the scale, the fact that chemistry consistently has a shorter time lapse than the other science fields.

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* Technical Report No. 18, A Study of Graduate Fellowship Applicants in Terms of PhD Attainment by John A. Creager. National Academy of Sciences-National Research Council, March 22, 1961.

Table 21

MEAN BA-TO-PHD TIME LAPSE BY YEAR FOR EACH DOCTORATE FIELD, 1920-1961

Year of Doctorate	Math	Phys.	Chem.	Geo-Sci.	Engr.	Tot. Phys Sci.	Agri.	Med. Sci.	Anat. Cyt.	Phy-siol.	Bio-Chem.	Bot-any	Mi-cro-Biol.	Zool.	Bio-Sci. Misc.	Tot. Bio. Sci.	Tot. Nat. Sci.
1920	7.1	7.8	5.8	7.7	5.7	6.6	7.8	6.9	6.0	7.1	7.0	6.8	8.2	7.2	8.8	7.4	7.0
1921	7.6	7.1	6.8	7.6	5.0	6.9	8.0	9.2	8.5	6.4	6.3	9.2	8.2	8.1	7.6	8.1	7.4
1922	8.5	6.8	5.8	7.8	5.5	6.4	6.7	9.1	13.5	6.9	6.7	7.8	6.0	6.8	7.2	7.3	6.7
1923	7.8	7.2	5.9	8.2	7.8	6.7	7.3	9.5	9.1	6.4	7.5	8.8	7.8	7.2	7.4	7.9	7.2
1924	8.8	8.0	6.2	8.4	7.7	7.0	7.5	11.1	7.0	8.2	6.2	8.4	7.4	8.7	8.0	8.2	7.4
1925	9.1	6.7	6.1	8.5	7.6	6.8	7.0	11.8	5.0	6.6	8.5	8.0	7.7	7.4	7.0	7.9	7.2
1926	7.4	8.1	6.3	7.8	7.4	6.9	8.7	11.0	5.8	6.7	9.4	8.9	6.9	8.4	6.9	8.4	7.4
1927	8.1	8.0	6.4	7.9	6.7	7.1	8.5	11.2	5.6	8.5	7.2	9.3	9.2	7.7	7.6	8.3	7.6
1928	8.5	6.9	6.3	7.2	6.7	6.7	8.2	9.8	7.6	9.2	7.5	7.9	7.1	7.7	7.5	7.9	7.2
1929	7.8	7.0	6.4	6.7	7.5	6.8	9.6	9.2	5.3	8.5	8.1	7.9	9.6	8.8	8.6	8.5	7.5
1920-1929	8.1	7.4	6.2	7.8	6.9	6.8	8.1	10.0	6.8	7.7	7.7	8.3	7.9	7.9	7.7	8.1	7.3
1930	7.2	7.0	6.5	6.8	7.1	6.8	8.8	7.9	8.3	6.7	6.4	8.3	8.8	7.3	7.7	7.7	7.1
1931	9.0	7.3	6.5	6.8	7.4	7.1	9.1	10.1	6.5	7.7	7.4	9.4	7.2	8.0	7.7	8.2	7.6
1932	8.6	7.2	6.2	8.9	7.6	7.0	9.0	9.4	6.7	7.7	7.2	9.1	6.8	7.6	7.5	8.0	7.4
1933	7.3	7.3	6.3	8.3	6.7	6.8	9.4	8.3	6.0	6.5	6.3	7.9	6.7	7.[illegible]	6.8	7.5	7.1
1934	7.1	6.8	6.2	6.5	6.8	6.5	8.3	8.4	7.9	8.6	5.8	8.0	8.6	6.9	6.8	7.6	7.0
1935	7.7	7.2	6.1	7.5	7.2	6.7	8.1	8.9	8.3	8.0	6.9	7.9	7.3	7.5	7.2	7.7	7.1
1936	7.2	7.2	6.4	8.1	7.5	6.8	8.2	9.0	10.2	7.4	8.8	7.6	7.3	8.1	7.1	7.9	7.3
1937	7.9	7.0	6.1	8.7	7.6	6.7	9.4	10.8	7.4	7.7	7.1	8.5	7.2	8.0	8.2	8.2	7.2
1938	7.3	7.2	6.1	8.4	8.4	6.8	9.7	10.9	8.1	7.6	7.2	8.0	7.3	7.7	8.7	8.0	7.4
1939	7.6	6.9	6.1	7.8	7.9	6.7	9.4	11.7	8.1	7.0	7.9	8.1	7.0	7.8	5.8	7.9	7.2
1930-1939	7.7	7.1	6.2	7.8	7.4	6.8	8.9	9.3	7.8	7.5	7.1	8.3	7.4	7.7	7.3	7.9	7.2
1940	7.4	6.9	6.0	8.5	8.2	6.7	8.6	12.8	9.4	7.7	6.3	7.7	7.8	8.6	9.1	8.1	7.3
1941	7.9	6.9	5.5	7.4	7.6	6.3	8.1	11.5	6.9	7.1	7.7	8.0	6.6	7.0	7.2	7.6	6.8
1942	6.4	7.0	5.5	7.3	6.6	6.0	7.7	10.1	5.8	7.5	6.7	7.9	6.2	7.6	6.9	7.4	6.6
1943	8.5	6.4	5.8	8.5	7.4	6.3	7.7	9.0	8.0	6.8	6.5	7.7	8.7	7.9	6.8	7.5	6.8
1944	7.6	7.0	5.5	9.7	7.9	6.1	9.2	11.9	11.0	8.1	6.6	9.6	7.0	9.0	6.0	8.3	6.9
1945	9.3	7.7	6.5	9.9	8.1	7.2	8.1	12.4	11.0	8.9	8.8	10.0	8.3	10.1	8.1	9.3	8.0
1946	8.3	8.5	6.4	10.7	8.7	7.5	12.2	11.5	9.0	9.0	8.8	9.1	8.5	9.5	8.6	9.6	8.3
1947	8.6	7.9	6.8	10.4	9.1	7.8	9.9	12.8	10.9	9.2	8.4	9.7	9.0	10.1	9.9	9.8	8.5
1948	9.1	8.0	7.5	9.5	8.7	8.1	10.2	12.9	8.6	8.6	8.3	9.8	9.0	9.4	9.5	9.5	8.6
1949	9.0	8.1	7.4	8.8	7.8	7.8	9.0	12.3	9.4	8.4	7.9	10.0	9.3	9.3	9.9	9.2	8.3
1940-1949	8.3	7.5	6.3	8.9	8.1	7.1	9.0	11.9	8.6	8.0	7.3	8.9	8.1	8.7	8.4	8.5	7.6
1950	8.4	7.6	7.3	8.7	7.8	7.6	8.7	12.1	10.8	8.9	8.8	8.8	9.0	9.2	9.2	9.1	8.1
1951	8.2	7.7	6.9	8.4	7.6	7.4	8.8	11.2	8.0	8.4	7.8	8.0	7.9	8.7	9.1	8.5	7.8
1952	8.0	7.3	6.7	8.0	8.0	7.3	8.1	9.9	7.2	7.5	7.0	8.3	8.0	8.6	7.3	8.0	7.6
1953	8.1	7.1	6.4	7.8	7.8	7.1	8.5	11.6	8.7	7.8	6.9	7.8	7.4	8.3	7.1	8.0	7.5
1954	8.0	7.2	6.2	7.7	7.9	7.0	8.0	9.2	6.9	7.4	7.0	7.3	7.5	7.9	8.2	7.7	7.3
1955	8.2	7.3	6.3	7.3	8.1	7.2	8.9	10.9	7.4	7.6	6.8	7.1	8.2	7.8	7.8	8.0	7.5
1956	8.7	7.2	6.7	8.1	8.5	7.5	8.8	8.9	8.8	8.3	7.4	7.9	7.7	8.2	8.2	8.2	7.8
1957	8.4	7.4	6.3	8.2	8.3	7.3	8.8	9.8	7.3	8.3	7.3	7.6	8.1	8.1	7.6	8.1	7.6
1958	8.3	7.5	6.5	8.3	8.2	7.4	8.8	9.2	9.6	8.5	7.7	7.9	8.8	8.7	8.5	8.5	7.9
1959	8.3	7.7	6.7	8.7	8.4	7.6	8.9	10.2	9.3	8.6	7.8	8.5	8.4	9.2	8.8	8.7	8.0
1950-1959	8.3	7.4	6.6	8.1	8.1	7.4	8.6	10.1	8.3	8.1	7.4	7.9	8.1	8.4	8.2	8.3	7.7
1960	8.6	7.5	6.9	8.6	8.6	7.8	8.9	9.9	8.4	9.2	8.6	7.9	8.8	9.1	8.8	8.8	8.2
1961	8.5	7.7	7.1	8.6	8.0	7.8	8.8	10.7	9.1	9.1	8.0	8.2	9.0	9.0	9.7	8.9	8.2
1960-1961	8.6	7.6	7.0	8.6	8.3	7.8	8.9	10.3	8.8	9.1	8.3	8.1	8.9	9.0	9.2	8.9	8.2
1920-1961	8.2	7.4	6.5	8.2	8.0	7.2	8.7	10.3	8.1	8.1	7.5	8.2	8.1	8.4	8.1	8.3	7.6

Table 21

MEAN BA-TO-PHD TIME LAPSE BY YEAR FOR EACH DOCTORATE FIELD, 1920-1961

Year of Doctorate	Psy.	An-thro.	Soc-iol.	Econ.	Hist.	Pol. Sci.	Soc. Sci. Misc.	Tot. Soc. Sci.	Eng. Lang. Lit.	For. Lang. Lit.	Phil.	Arts Prof. Misc.	Bus. Adm.	Rel.	Prof. Misc.	Tot. Arts Prof.	Educ.	Tot. S.S. Arts Educ.	Grand Total
1920	7.8	5.5	7.6	8.1	9.2	6.5	4.5	7.8	9.9	8.8	7.9	7.6	4.0	7.5	9.2	8.6	10.2	8.6	7.7
1921	7.3	9.0	9.3	8.4	8.7	7.5	7.5	8.2	9.9	8.5	6.6	8.7	16.0	9.4	6.4	8.3	9.8	8.4	7.9
1922	8.2	5.0	8.5	9.1	8.9	7.9	13.7	8.7	9.9	8.8	8.4	8.1	--	8.7	7.2	8.7	11.1	9.1	7.8
1923	8.2	10.0	9.4	6.8	8.5	7.1	7.7	8.0	10.6	8.7	8.7	9.2	12.0	7.9	7.5	9.0	9.5	8.6	7.8
1924	8.7	11.0	9.7	8.0	9.6	10.4	9.6	9.2	9.5	10.2	7.2	10.5	4.0	8.1	12.2	9.5	9.9	9.5	8.4
1925	9.3	10.0	8.9	7.8	10.2	7.5	8.3	8.9	10.3	9.9	9.0	9.8	11.5	8.6	7.4	9.5	11.7	9.7	8.5
1926	8.6	4.7	9.2	8.5	9.9	6.8	10.2	8.7	9.9	11.2	7.1	10.2	7.2	10.8	8.1	9.6	11.8	9.7	8.6
1927	8.5	6.7	11.2	9.3	8.8	7.8	9.0	8.9	10.1	11.4	8.6	10.9	7.6	7.9	8.0	9.6	11.3	9.6	8.7
1928	8.2	5.3	9.8	8.6	9.1	7.3	9.2	8.5	10.8	11.1	7.9	9.9	8.6	10.5	9.7	10.1	11.7	9.7	8.4
1929	8.9	10.3	10.4	8.8	9.3	6.8	10.5	9.1	9.5	11.2	9.2	10.5	8.5	9.7	9.0	10.0	11.9	10.0	8.8
1920-1929	8.5	8.3	9.6	8.5	9.2	7.6	9.3	8.7	10.1	10.2	8.2	9.9	8.4	9.1	8.4	9.5	11.3	9.5	8.4
1930	7.3	7.7	11.1	8.9	10.2	8.2	9.0	9.0	11.0	11.1	8.8	8.8	7.8	8.0	9.4	9.9	12.8	10.3	8.7
1931	8.8	7.0	9.9	9.9	10.6	8.3	10.8	9.6	10.7	11.1	9.2	9.8	8.8	9.7	7.6	9.9	12.3	10.4	9.0
1932	8.0	7.6	11.5	9.4	10.4	7.5	12.0	9.4	10.3	11.1	7.5	10.1	9.5	9.8	9.0	10.0	13.6	10.6	9.1
1933	7.1	9.5	10.9	8.6	10.0	8.2	10.2	9.0	10.1	10.4	9.2	7.4	10.4	12.3	7.6	9.8	13.2	10.2	8.6
1934	8.1	6.7	10.5	9.4	10.0	7.6	9.8	9.0	9.8	9.4	9.3	9.1	9.1	10.4	8.6	9.5	13.5	10.2	8.5
1935	8.7	9.2	10.7	9.1	10.2	8.7	10.1	9.5	9.3	9.9	9.0	9.8	10.4	10.5	8.8	9.7	13.8	10.4	8.7
1936	8.5	7.7	12.1	9.5	9.9	9.1	9.5	9.4	11.6	10.8	9.2	9.4	13.0	13.1	8.3	10.8	14.1	11.2	9.2
1937	9.0	11.2	10.6	10.4	10.3	8.9	9.1	9.9	10.8	10.0	8.4	11.0	11.5	10.9	9.4	10.3	14.6	11.3	9.2
1938	8.8	10.1	10.8	11.0	11.1	7.8	12.0	10.2	11.6	10.4	7.8	10.9	11.2	11.5	8.9	10.6	14.9	11.6	9.5
1939	7.5	9.0	10.6	10.3	11.1	9.1	13.2	9.9	11.7	11.1	9.4	9.4	10.8	9.8	11.3	10.9	14.4	11.4	9.3
1930-1939	8.2	8.8	10.8	9.7	10.4	8.3	10.4	9.5	10.8	10.5	8.8	9.6	10.4	10.6	8.7	10.2	13.8	10.8	9.0
1940	9.2	8.6	10.5	11.1	11.5	8.6	11.2	10.3	11.3	10.4	9.0	12.0	11.6	12.0	10.6	10.9	14.4	11.7	9.4
1941	8.1	8.9	11.9	10.1	9.5	8.4	10.2	9.5	11.2	10.6	10.1	10.8	10.6	8.6	15.1	10.7	14.2	11.2	8.9
1942	8.2	10.3	11.2	9.8	10.2	9.8	9.2	9.7	11.0	9.9	8.9	11.3	11.9	7.5	12.5	10.2	14.0	11.1	8.8
1943	8.9	8.8	12.1	9.2	11.7	10.1	14.0	10.4	12.2	10.7	9.1	11.3	13.2	8.7	13.7	11.0	15.4	12.2	9.4
1944	8.3	8.0	12.6	10.2	13.8	9.5	12.6	10.8	12.2	12.0	9.9	13.3	11.8	6.8	15.2	10.9	15.3	12.4	9.4
1945	9.9	8.6	10.2	11.2	13.8	12.3	12.2	11.5	13.6	12.4	12.8	12.5	13.4	10.6	12.4	12.3	16.6	13.6	10.9
1946	9.0	13.1	13.5	11.3	12.4	11.8	9.6	11.5	12.9	13.6	11.8	13.8	11.8	11.0	15.7	12.8	15.9	13.3	11.0
1947	9.1	11.2	12.6	11.4	12.1	10.2	12.2	11.2	13.4	13.9	10.5	12.0	11.4	10.3	11.5	12.5	16.3	13.1	10.9
1948	10.0	14.4	12.1	11.7	12.1	11.3	15.5	11.5	13.0	13.1	10.7	13.8	15.4	10.4	13.6	12.8	15.3	13.2	10.8
1949	8.8	11.1	12.6	12.0	11.6	9.8	10.9	10.7	12.3	13.2	10.2	12.8	12.6	10.2	11.1	12.0	15.3	12.6	10.2
1940-1949	9.0	10.4	12.0	10.9	11.5	10.0	11.7	10.6	12.2	11.8	10.1	12.4	12.4	9.5	12.8	11.6	15.2	12.4	10.0
1950	9.0	11.0	12.2	11.1	11.4	10.1	9.6	10.5	12.7	12.4	11.0	12.8	12.5	9.5	13.7	12.1	15.0	12.4	10.2
1951	8.3	11.0	11.1	10.6	10.7	10.4	12.0	10.0	11.8	12.0	9.9	11.7	10.8	12.3	13.8	11.8	14.5	11.8	9.8
1952	8.3	10.8	11.5	9.9	10.7	9.9	9.1	9.6	12.1	13.0	9.1	12.5	12.4	12.8	14.5	12.3	14.7	12.0	9.8
1953	7.9	9.0	10.8	10.4	11.0	9.6	11.1	9.6	12.0	11.2	9.4	11.5	10.2	12.4	13.6	11.5	14.9	11.8	9.7
1954	7.7	8.8	10.2	10.3	10.6	9.5	12.5	9.4	11.5	11.6	10.0	11.8	11.8	11.7	12.8	11.6	15.4	11.9	9.7
1955	7.5	9.1	11.3	10.7	10.7	10.2	10.9	9.5	12.5	11.8	8.8	11.8	10.9	13.2	12.1	11.8	15.2	12.0	9.9
1956	8.3	9.7	11.7	10.5	12.0	10.3	13.1	10.1	12.0	11.6	10.6	12.0	11.4	12.9	15.3	12.0	15.4	12.5	10.3
1957	9.5	10.0	11.2	10.2	11.2	11.9	13.0	10.5	12.6	12.2	10.4	12.9	11.8	13.4	14.6	12.5	15.7	12.7	10.2
1958	9.2	11.0	11.5	10.2	11.5	11.3	12.1	10.4	11.8	12.5	10.8	11.5	11.6	12.8	15.7	12.1	15.3	12.4	10.3
1959	9.2	9.9	11.3	10.8	11.2	10.9	12.9	10.4	11.1	12.2	10.2	12.5	12.9	13.4	15.1	12.1	15.3	12.4	10.3
1950-1959	8.5	10.1	11.3	10.5	11.1	10.5	12.0	10.0	12.0	12.0	10.0	12.1	11.7	12.5	14.2	12.0	15.2	12.2	10.0
1960	9.3	9.6	11.0	10.4	11.3	11.3	13.0	10.4	11.4	11.7	10.2	12.1	11.3	13.4	15.4	12.0	15.6	12.5	10.4
1961	9.5	9.8	11.1	10.3	11.0	10.9	14.2	10.4	11.8	11.8	10.5	12.0	11.7	12.0	15.0	11.9	14.8	12.3	10.3
1960-1961	9.4	9.7	11.1	10.4	11.2	11.1	13.6	10.4	11.6	11.7	10.4	12.1	11.5	12.7	15.2	12.0	15.2	12.4	10.3
1920-1961	8.7	9.8	11.2	10.2	10.9	10.0	11.8	10.0	11.6	11.4	9.6	11.7	11.5	11.2	12.0	11.4	14.9	11.9	9.8

Age At Doctorate

Information on age at doctorate is not available for the pre-1957 graduates, and can only be inferred in a general way from the BA-to-PhD time lapse data. From 1957 on, date of birth and number of dependents is known, and is given in Table 22. Age distributions, as shown in Figure 16, are asymmetrical, so medians rather than means are given in Table 22, as medians are less affected by the extreme cases. The final box in Table 22, which includes all cases, indicates practically no change in median age over the five years shown. Declines in the older groups (arts & professions, and education) are balanced by slight increases in the natural sciences. Figure 16 shows graphically the distribution of ages at doctorate for the five major fields for the graduates of 1961. Here it is quite apparent that these five fields differ significantly in both modal age and spread, with a marked and progressive increase in the proportion of cases in the older age groups as one moves down the figure from physical sciences to education. At the lowest age levels, however, the physical sciences are only slightly ahead of the average, while there is practically no difference between the bio-science, social science, and arts and professions groups.

These differences in age are roughly paralleled by differences in numbers of dependents, the educators having the largest number of dependents, by a wide margin. The bio-scientists, although they are the next-to-youngest group, are second in number of dependents, ranking slightly above the average of all doctorates, as shown in Figure 17. The social scientists and the arts and professions groups were insignificantly different in number of dependents, and have been combined into a single group in Figure 17. Finally, the youngest group, the physical scientists, are also lowest in number of dependents.

Figure 16

AGE AT DOCTORATE, BY FIELD, 1961

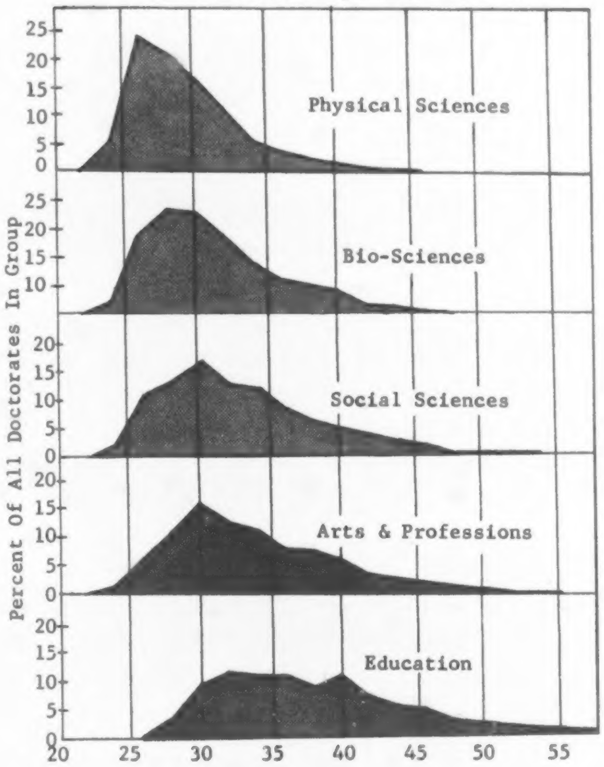


Table 22

MEDIAN AGE AT DOCTORATE, BY YEAR, 1957-1961, IN FIVE FIELDS WITH VARYING NUMBERS OF DEPENDENTS

	No Dependents					One Dependent					Two Dependents					Three Dependents				
Field	1957	1958	1959	1960	1961	1957	1958	1959	1960	1961	1957	1958	1959	1960	1961	1957	1958	1959	1960	1961
Education	39.1	39.3	38.2	39.3	38.9	40.4	38.4	38.3	39.2	38.8	38.6	37.9	38.2	36.8	36.7	38.3	37.6	38.0	38.0	36.9
Arts & Professions	34.3	33.2	32.7	33.3	33.0	33.7	32.5	33.1	31.4	31.4	32.7	31.8	32.3	31.8	31.8	34.9	33.9	34.2	33.5	33.7
Biological Sciences	28.8	29.2	29.4	29.5	29.6	28.9	31.0	31.3	29.5	29.0	29.8	29.7	29.6	29.8	29.8	31.5	31.6	31.1	31.0	31.5
Physical Sciences	26.9	27.3	27.8	27.5	27.5	27.7	27.8	27.9	27.8	27.7	28.3	28.1	28.1	28.4	28.4	29.9	30.3	29.9	30.0	30.2
Social Sciences	30.9	31.2	31.3	30.9	31.1	30.8	31.4	30.2	30.1	30.3	31.1	31.6	31.0	30.9	30.9	33.7	33.5	33.4	33.1	32.5
Total All Fields	30.0	30.0	30.1	30.1	30.3	29.9	30.0	29.9	29.7	29.5	30.6	30.5	30.2	30.3	30.4	33.1	33.2	32.7	32.3	32.4

	Four Dependents					Five or More Dependents					All Cases, Regardless of Number of Dependents				
Field	1957	1958	1959	1960	1961	1957	1958	1959	1960	1961	1957	1958	1959	1960	1961
Education	38.0	38.6	38.6	38.2	37.5	39.2	39.2	39.1	38.3	37.6	38.7	38.1	37.9	38.3	37.6
Arts & Professions	36.3	35.8	34.9	34.9	34.6	36.8	37.2	37.2	36.8	37.6	34.8	33.6	33.6	33.3	33.2
Biological Sciences	33.2	32.6	33.5	33.1	32.4	34.6	34.0	35.0	34.8	35.9	30.2	30.2	30.4	30.6	30.5
Physical Sciences	32.1	32.1	32.1	31.5	31.9	33.7	33.4	33.0	33.9	32.8	28.4	28.4	28.6	28.7	28.7
Social Sciences	35.2	34.5	34.3	34.9	34.2	35.9	36.7	36.0	37.5	35.9	32.2	32.4	32.0	31.8	32.0
Total All Fields	34.7	34.4	34.4	34.6	34.0	36.2	36.7	36.0	36.1	35.8	31.6	31.5	31.4	31.4	31.4

The data from the total line of Table 22 are shown graphically in Figure 18. Medians, as given here, are more conservative than means, which would be systematically higher for these data.

Age and Number of Dependents of Doctorates

The mean number of dependents has steadily increased for all doctorates from 1.8 in 1957 to 2.0 in 1961, as shown in Table 23 and Figure 17. The same tendency is found in each of five major fields and is not related to an increase in the ages at which doctorates are obtained; age has actually declined slightly over the same period, as shown in Figure 18 and Table 22.

Figure 18 shows the median age of doctorates for all fields combined for varying numbers of dependents. Those with one dependent are mostly married individuals with no children. If one considers marital status and number of children (usually number of dependents minus one for the wife) as causal factors and age as the dependent variable, then it can be said that getting married does not on the average slow down the attainment of the doctorate, and that the first child has only a minor effect. Beyond that, as Table 22 shows, there is a progressively greater age of doctorate attainment for those having three, four, and five or more dependents. These patterns are not the result of field differences. Very similar patterns are found in all five major fields except education, where age at doctorate is considerably greater.

It is interesting to note that age at doctorate has tended in general to decline for those with dependents; only the "no dependent" group has increased in age over the 1957-61 period. There is a slight tendency for the "oldest" fields (education & arts) to decrease in age, and for the "younger" fields (the sciences) to increase slightly; on balance there is a slight over-all decline in age at doctorate.

Figure 17

INCREASE IN DEPENDENTS, BY FIELD, 1957-1961

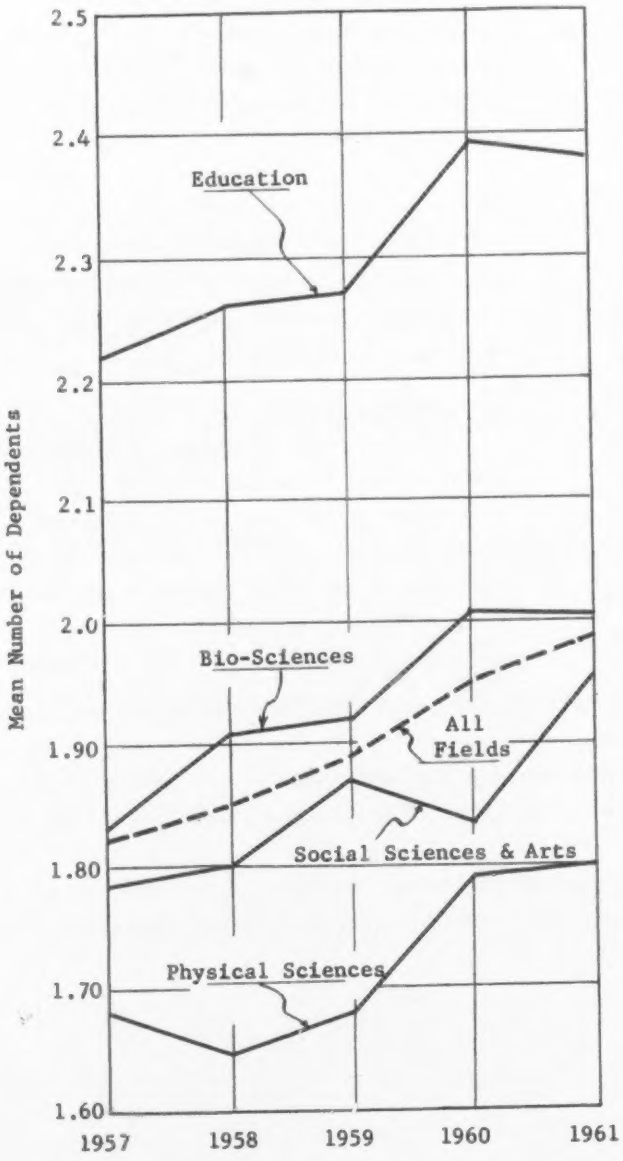
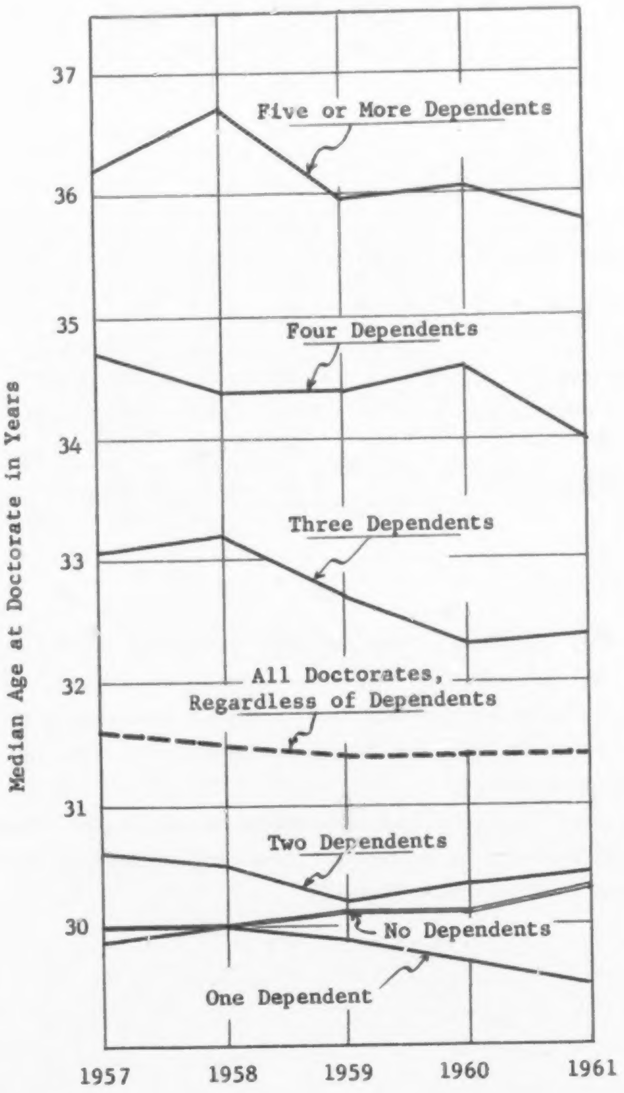


Figure 18

MEDIAN AGE OF DOCTORATES WITH VARYING NUMBERS OF DEPENDENTS, 1957-1961 ALL FIELDS COMBINED



Predoctoral Professional Experience

The factors of age, of dependents, and of customary practice in the various fields with respect to the scheduling of graduate education are also tied up with another factor regarding which no information is available in the Doctorate Survey: support for graduate education. Studies done elsewhere indicate that this is a complicated question, with multiple sources of support being the rule rather than the exception. Data have been available since 1957, however, with respect to the amount of professional experience accumulated prior to the granting of the doctorate degree. Table 24 provides information on the amount of predoctoral professional experience in ten major fields and three field groups. There is a substantial correlation between the median number of years of professional experience (or percentage with more than ten years experience) and age at doctorate, as well as with number of dependents, as shown by comparing data for the various fields. As there are wide sub-field variations within field groups, and even wider individual differences within sub-fields, only a limited amount of information can be derived from the average figures for the fields. The distributions given in Table 24 indicate quite clearly the extent of variation within fields with respect to amount of professional experience prior to the doctorate. Although in most fields the modal point is somewhere near the middle of the distribution, the two exceptions of chemistry and education are worthy of particular note. In chemistry, 44 percent of the graduates have had less than one year's professional experience, whereas in education the modal number of years of experience is in excess of 15.

Table 23

MEAN NUMBER OF DEPENDENTS, BY YEAR, 1957-1961, IN 29 DOCTORATE FIELDS

Field	1957	1958	1959	1960	1961	Total 57-61
Mathematics	1.56	1.42	1.50	1.84	1.59	1.59
Physics	1.54	1.47	1.50	1.74	1.72	1.60
Chemistry	1.47	1.47	1.56	1.53	1.53	1.51
Geo-Sciences	1.87	1.96	2.09	2.08	2.13	2.04
Engineering	2.15	2.01	1.94	2.07	2.14	2.06
Total Physical Sciences	1.68	1.65	1.68	1.79	1.80	1.73
Agricultural Sciences	2.44	2.34	2.34	2.45	2.35	2.38
Medical Sciences	2.17	1.93	2.29	2.49	2.66	2.33
Anat., Cytol., Embryol.	2.27	1.53	1.79	2.00	1.97	1.90
Physiology and Related	1.66	2.01	1.93	2.17	2.05	1.95
Biochemistry	1.37	1.59	1.48	1.76	1.67	1.59
Botany-Phytopathology	1.72	1.98	1.74	1.84	1.99	1.85
Microbiology	1.66	1.88	1.78	1.96	1.63	1.79
Zoology and Entomology	1.86	1.83	1.77	1.79	2.08	1.87
Bio-Sciences, Misc.	1.73	1.67	1.99	2.08	1.73	1.86
Total Bio-Sciences	1.83	1.91	1.92	2.05	2.01	1.95
Total Natural Sciences	1.74	1.75	1.77	1.88	1.87	1.81
Psychology	1.66	1.72	1.74	1.65	1.81	1.72
Anthropology-Archeology	1.37	1.36	1.87	1.62	1.84	1.61
Sociology	1.95	2.01	1.99	1.91	1.77	1.93
Economics	2.16	2.08	2.29	2.13	2.24	2.19
History	1.64	1.64	1.89	1.73	1.92	1.77
Public Administration	2.10	1.98	1.79	1.96	2.04	1.97
Social Sciences, Misc.	1.85	1.73	2.07	2.23	2.04	2.00
Total Social Sciences	1.81	1.81	1.90	1.83	1.94	1.86
English Language & Lit.	1.50	1.52	1.72	1.64	1.80	1.65
Foreign Language & Lit.	1.53	1.45	1.52	1.44	1.62	1.51
Philosophy	1.71	1.71	1.84	1.44	1.67	1.66
Arts & Humanities	1.87	2.06	1.88	1.97	2.20	2.00
Business Administration	2.16	2.27	2.21	2.54	2.57	2.37
Religion-Theology	2.26	2.03	2.27	2.23	2.60	2.28
Misc. Professions	1.50	1.70	1.36	1.79	1.55	1.59
Total Arts & Professions	1.74	1.79	1.83	1.84	1.99	1.85
Education	2.22	2.26	2.28	2.39	2.38	2.31
Total Soc. Sci-Arts-Educ.	1.92	1.95	2.00	2.01	2.10	2.00
Grand Total	1.83	1.85	1.89	1.95	1.99	1.91

Employer Categories

The categories of employers of these graduates in their first postdoctoral jobs are given in Table 25. Analysis of these data shows that the nation's colleges and universities are the major employers in all fields except chemistry and engineering, where business and industry predominate as employers. Even in these two fields there is a trend over the short period of years shown, in the direction of a greater proportion of doctorates in the college and university category, although this trend is not strong nor consistent. The proportion employed in higher education (of those with definite job commitments at the time of graduation) varied from less than one fourth in chemistry to about 85 percent in the arts and professions field, and slightly less in the social sciences.

Time trends over this period are not strong except toward a larger percentage to foreign countries, into either private or public employment. A general but irregular tendency toward decreasing percentages going into United States government employment is also in evidence.

Table 24

PREDOCTORAL PROFESSIONAL EXPERIENCE IN TEN MAJOR FIELDS: DOCTORATES OF 1957-1961 COMBINED

Years of Predoctoral Professional Experience	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI.-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
0	86	278	950	39	147	1500	1165	2665	167	350	289	19	825	3490
Less than 1	115	417	1312	111	333	2288	659	2947	145	355	249	15	764	3711
1-1.9	186	425	867	162	475	2115	901	3016	442	706	544	79	1771	4787
2-2.9	178	356	545	156	421	1656	981	2637	628	704	609	149	2090	4727
3-3.9	189	292	368	133	407	1389	869	2258	558	640	590	243	2031	4289
4-5.9	221	298	428	170	592	1709	1142	2851	671	823	1009	608	3111	5962
6-7.9	148	173	216	114	386	1037	683	1720	367	643	757	730	2497	4217
8-9.9	70	112	135	84	324	725	530	1255	279	496	604	971	2350	3605
10-14.9	92	96	146	77	380	791	605	1396	285	646	931	2045	3907	5303
15 or more	97	113	176	60	247	695	552	1247	267	662	894	2798	4621	5868
Total	1382	2560	5145	1106	3712	13905	8087	21992	3809	6025	6476	7657	23967	45959
Unknown	66	106	177	21	78	448	342	790	135	265	314	165	879	1669
Median No. of Years	3.7	2.4	1.4	3.6	4.2	2.6	3.4	2.9	3.9	4.6	5.8	12.5	7.2	4.6
Percent 10+ Yrs. Exper.	13.7	8.2	6.3	12.4	16.9	10.7	14.3	12.0	14.5	21.7	28.2	63.2	35.6	24.3

Change in Sex Ratio of Doctorate-Holders

Table 26 provides data on the decline in the percentage of women among the doctorate-holders from 1920 through 1961. The numbers of men and women are in the main body of the table, and the percentages of women in each field during each five-year period are given in a sub-table. These percentages are shown in Figure 19 for five major fields. Although the major change after World War II, there was already a decline from the 15 percent of all doctorates recorded in 1925-1929. By 1940-1944 the percentage of women had declined to 13.3 for all fields combined, and then dropped again to a post-war low of less than ten percent in the 1950-1954 period. This decline has been general in all major fields. The latest two periods show a gradual rise following the sharp post-war drop, in all major fields except the physical sciences, where the proportion of women was always very low. In general, it can be said that the greatest proportional decline in percentage of women doctorates has been in those fields in which the fewest women originally earned doctorates, while the smallest proportional decline has been in the fields with the largest original proportion of women. Without exception, it might be noted, no major field has regained since the war the percentage of women doctorates it had prior to World War II.

Citizenship of Doctorate-Holders of Foreign Origin

Table 27 provides information on area of birth and citizenship status for the 1957-1961 doctorates who were born in foreign countries and who also had their secondary education abroad. (This dual requirement was designed to eliminate those individuals who were born overseas because of a temporary foreign assignment of their parents). For the foreign-born group with secondary education abroad, the general region of birth is given and for those from each region, the citizenship status as of the time the Doctorate Survey form was completed. Citizenship status is shown for doctorates in each of the five major fields, in five categories: (1) U.S. citizen (2) permanent resident non-citizen (3) U.S. citizenship applied for (4) other status, but non-U.S. citizenship, and (5) unknown.

Table 25

FIRST POST-DOCTORAL EMPLOYERS OF GRADUATES OF 1957-1961, BY YEAR

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC SCI-ARTS-EDUC	GRAND TOTAL ALL FIELDS
U.S. COLLEGE OR UNIVERSITY	1957	126	153	181	61	172	693	692	1385	221	616	802	607	2246	3631
	1958	132	167	177	74	222	772	655	1427	246	716	817	708	2487	3914
	1959	164	200	247	87	256	954	697	1651	276	811	924	792	2803	4454
	1960	148	193	164	81	273	859	622	1481	241	762	1032	796	2831	4312
	1961	172	185	178	70	307	912	593	1505	296	833	1083	893	3105	4610
TOTAL, 1957-61		742	898	947	373	1230	4190	3259	7449	1280	3738	4658	3796	13472	20921
U.S. ELEMENTARY OR SECONDARY SCHOOL	1957	0	0	4	0	2	6	12	18	34	20	45	294	393	411
	1958	3	5	1	0	2	11	13	24	41	21	36	329	427	451
	1959	1	5	2	1	2	11	10	21	38	22	46	334	440	461
	1960	1	1	2	0	1	5	8	13	28	19	39	382	468	481
	1961	2	2	3	0	3	10	7	17	52	18	43	410	523	540
TOTAL, 1957-61		7	13	12	1	10	43	50	93	193	100	209	1749	2251	2344
U.S. GOVERNMENT CIVILIAN	1957	7	48	26	31	18	130	139	269	51	64	9	20	144	413
	1958	10	35	26	22	25	118	112	230	54	53	10	24	141	371
	1959	6	47	30	20	25	128	122	250	81	62	13	12	168	418
	1960	18	34	30	26	20	128	115	243	61	66	12	14	153	396
	1961	8	33	31	28	23	123	108	231	57	63	11	17	148	379
TOTAL, 1957-61		49	197	143	127	111	627	596	1223	304	308	55	87	754	1977
FOREIGN, GOV OR PRIVATE	1957	1	1	0	2	4	8	10	18	2	8	3	3	16	34
	1958	1	4	2	6	11	24	43	67	2	10	6	9	27	94
	1959	1	3	6	12	13	35	54	89	2	15	7	14	38	127
	1960	20	16	33	19	24	112	154	266	16	91	42	47	196	462
	1961	14	21	25	31	44	135	159	294	24	106	85	69	284	578
TOTAL, 1957-61		37	45	66	70	96	314	420	734	46	230	143	142	561	1295
STATE, LOCAL GOVERNMENT	1957	0	0	2	4	1	7	29	36	60	15	2	60	137	173
	1958	0	1	3	6	3	13	31	44	74	21	2	48	145	189
	1959	0	1	3	4	1	9	39	48	79	20	7	57	163	211
	1960	0	1	2	6	5	14	20	34	87	24	2	53	166	200
	1961	0	3	2	7	2	14	28	42	78	14	5	47	144	186
TOTAL, 1957-61		0	6	12	27	12	57	147	204	378	94	18	265	755	959
NON-PROFIT	1957	4	17	13	3	13	50	57	107	51	46	56	36	189	296
	1958	5	15	11	3	15	49	57	106	60	40	49	31	180	286
	1959	4	16	18	5	11	54	45	99	52	43	51	35	181	280
	1960	3	16	18	7	17	61	43	104	39	44	58	35	176	280
	1961	9	22	17	6	30	84	33	117	63	38	51	44	196	313
TOTAL, 1957-61		25	86	77	24	86	298	235	533	265	211	265	181	922	1455
INDUSTRY OR BUSINESS	1957	41	117	558	43	242	1001	113	1114	36	32	17	7	92	1206
	1958	27	113	485	44	230	899	129	1028	37	27	20	9	93	1121
	1959	45	105	497	60	233	940	110	1050	54	29	26	16	125	1175
	1960	34	132	518	45	285	1014	127	1141	37	32	23	11	103	1244
	1961	46	97	470	54	335	1002	111	1113	30	26	19	12	87	1200
TOTAL, 1957-61		193	564	2528	246	1325	4856	590	5446	194	146	105	55	500	5946
SELF-EMPLOYED	1957	0	0	3	1	3	7	7	14	14	3	6	3	26	40
	1958	0	2	2	2	3	9	10	19	18	3	16	3	40	59
	1959	0	0	1	2	1	4	4	8	10	6	5	5	26	34
	1960	0	1	2	2	2	7	7	14	19	7	9	4	39	53
	1961	2	0	1	2	6	11	7	18	17	5	6	7	35	53
TOTAL, 1957-61		2	3	9	9	15	38	35	73	78	24	42	22	166	239
OTHER	1957	1	10	11	3	11	36	41	77	12	12	6	7	37	114
	1958	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1959	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1960	8	11	15	4	20	58	33	91	18	28	10	4	60	151
	1961	6	21	12	3	35	77	22	99	18	17	6	7	48	147
TOTAL, 1957-61		15	42	38	10	66	171	96	267	48	57	22	18	145	412
TOTAL, ALL EMPLOYED	1957	180	346	798	148	466	1938	1100	3038	481	816	946	1037	3280	6318
	1958	178	342	707	157	511	1895	1050	2945	532	891	956	1161	3540	6485
	1959	221	377	804	191	542	2135	1081	3216	592	1008	1079	1265	3944	7160
	1960	232	405	784	190	647	2258	1129	3387	546	1073	1227	1346	4192	7579
	1961	259	384	739	201	785	2368	1068	3436	635	1120	1309	1506	4570	8006
TOTAL, 1957-61		1070	1854	3832	887	2951	10594	5428	16022	2786	4908	5517	6315	19526	35548

Figure 19

PERCENTAGE OF WOMEN DOCTORATE-HOLDERS IN FIVE MAJOR FIELDS 1920-1961

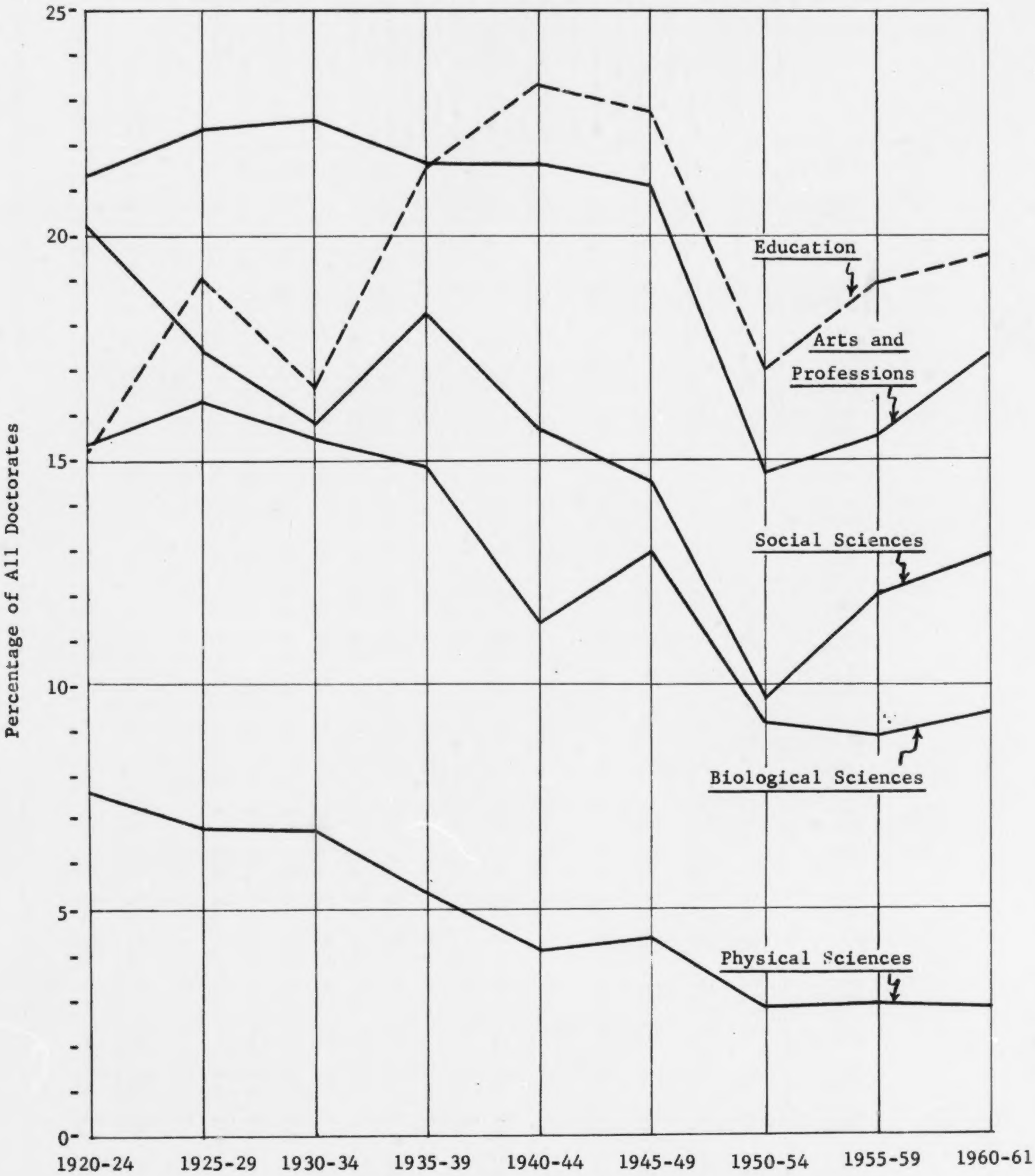


Table 26

ANNUAL AWARDS OF DOCTORATES, 1920-1961, TO MEN AND WOMEN: PHYSICAL AND BIOLOGICAL SCIENCES

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat.,Cytol.,Embryol.	Physiology & Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology & Entomology	Bio-Sciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
1920	MALE	15	25	70	20	8	138	°	10	1	12	6	27	8	18	17	108	246
	FEMALE	4	6	5	1	0	16	0	1	1	7	3	6	1	3	3	25	41
1921	MALE	9	33	117	10	10	179	10	25	5	13	5	16	7	22	15	118	297
	FEMALE	6	4	8	2	0	20	0	0	1	3	2	2	1	3	3	15	35
1922	MALE	13	52	132	20	14	231	16	15	2	12	15	29	8	21	15	133	364
	FEMALE	4	3	6	2	1	16	1	1	1	2	3	4	4	5	5	26	42
1923	MALE	31	59	173	38	13	314	24	21	7	19	9	43	22	34	21	200	514
	FEMALE	3	1	12	2	0	18	1	3	3	6	2	12	5	4	7	43	61
1924	MALE	25	57	206	41	14	343	19	25	1	24	17	37	6	36	21	186	529
	FEMALE	4	5	17	3	0	29	1	0	3	6	3	5	1	5	3	27	56
1925	MALE	23	48	191	26	16	304	22	24	5	19	18	37	13	40	23	201	505
	FEMALE	5	3	18	1	0	27	0	4	0	4	4	12	9	10	1	44	71
1926	MALE	44	82	235	40	26	427	24	24	9	18	22	38	21	38	27	221	648
	FEMALE	4	4	17	2	1	28	0	5	0	2	10	13	0	6	1	37	65
1927	MALE	43	75	197	43	33	391	32	19	13	25	36	29	10	45	26	235	626
	FEMALE	8	5	18	2	0	33	0	2	1	7	8	7	10	8	12	55	88
1928	MALE	39	92	236	30	50	447	36	14	9	18	31	46	25	59	38	276	723
	FEMALE	3	1	17	1	0	22	1	2	0	8	6	13	4	13	3	50	72
1929	MALE	61	89	225	48	41	464	41	24	14	37	31	48	15	66	37	313	777
	FEMALE	8	7	24	0	0	39	0	4	1	9	7	17	5	8	5	56	95
1930	MALE	65	101	274	62	64	566	39	30	4	40	30	50	21	61	38	313	879
	FEMALE	9	5	23	4	0	41	0	7	3	4	11	19	4	14	3	65	106
1931	MALE	71	107	298	38	65	579	50	30	11	46	29	50	42	82	62	402	981
	FEMALE	10	4	31	4	3	52	1	7	0	10	7	10	7	21	4	67	119
1932	MALE	61	107	297	52	67	584	53	24	15	37	28	70	33	80	32	372	956
	FEMALE	13	8	31	2	0	54	2	5	4	12	9	19	11	14	8	84	138
1933	MALE	62	131	361	70	91	715	62	29	16	42	45	61	38	72	43	408	1123
	FEMALE	13	2	21	4	0	40	0	5	5	10	4	9	9	15	9	66	106
1934	MALE	75	117	394	65	117	768	70	41	16	58	54	62	39	107	44	491	1259
	FEMALE	17	7	21	1	0	46	0	5	4	10	6	16	11	18	12	82	128
1935	MALE	69	136	357	72	110	744	72	28	20	42	41	64	29	109	51	456	1200
	FEMALE	10	2	26	1	0	39	0	5	3	4	16	15	1	15	3	62	101
1936	MALE	67	136	428	72	69	772	55	28	13	74	9	79	42	125	19	444	1216
	FEMALE	10	4	27	0	1	42	0	5	6	16	2	21	6	42	3	101	143
1937	MALE	63	152	469	52	90	826	52	16	11	68	21	80	40	130	12	430	1256
	FEMALE	11	7	35	2	1	56	2	0	3	24	1	17	10	14	3	74	130
1939	MALE	54	146	388	67	67	722	53	29	12	62	90	85	32	114	24	501	1223
	FEMALE	7	8	18	2	0	35	1	1	2	20	18	14	8	17	3	84	119
1939	MALE	80	153	441	57	60	791	52	13	16	59	91	89	44	115	22	501	1292
	FEMALE	13	3	23	2	1	42	2	3	1	13	25	11	8	24	0	87	129
1940	MALE	96	141	495	57	103	892	81	25	11	71	115	93	51	152	28	627	1519
	FEMALE	9	3	29	6	1	48	0	5	5	15	12	19	8	21	1	86	134
1941	MALE	89	179	634	64	117	1083	91	30	18	95	87	88	64	154	25	652	1735
	FEMALE	8	7	16	3	0	34	0	1	2	13	17	19	4	8	0	64	98
1942	MALE	69	147	571	63	90	940	91	27	11	81	120	96	54	150	23	653	1593
	FEMALE	7	8	20	3	0	38	0	2	1	7	17	19	13	12	3	74	112
1943	MALE	38	119	490	39	51	737	64	17	6	68	101	81	42	103	24	506	1243
	FEMALE	5	11	16	3	0	35	1	2	3	6	14	6	10	10	2	54	89
1944	MALE	29	60	458	16	63	626	42	25	3	26	91	32	30	51	9	309	935
	FEMALE	14	3	11	1	0	29	0	4	3	9	6	15	13	19	2	71	100

Table 26

ANNUAL AWARDS OF DOCTORATES, 1920-1961, TO MEN AND WOMEN: SOCIAL SCIENCES, ARTS, AND PROFESSIONS

Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, Misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professions	Business Administration	Religion-Theology	Misc. Professions	TOTAL ARTS-PROFESSIONS	Education	TOTAL SOC. SCI.-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
27	3	11	22	14	11	1	89	16	36	15	10	1	11	6	95	40	224	470
8	1	2	0	8	1	2	22	7	8	3	1	0	0	0	19	8	49	90
21	3	11	32	25	23	6	121	20	26	16	14	1	8	23	108	27	256	553
7	0	0	6	13	1	1	28	10	16	7	4	0	0	2	39	5	72	107
18	0	13	28	47	17	2	125	24	35	19	17	0	19	12	126	52	303	667
16	1	1	5	9	0	1	33	10	10	5	5	0	0	1	31	7	71	113
46	5	10	39	47	19	8	174	35	35	29	23	1	18	22	163	54	391	905
20	0	2	1	14	3	0	40	9	13	10	6	0	0	4	42	14	96	157
30	2	13	43	47	28	5	168	37	54	18	15	1	26	20	171	89	428	957
21	2	4	7	13	1	0	48	20	11	10	4	0	2	3	50	13	111	167
52	4	22	56	50	24	12	220	39	40	26	17	2	23	24	171	104	495	1000
19	1	4	8	13	4	2	51	16	17	10	8	0	3	3	57	24	132	203
58	4	16	78	47	29	11	243	54	40	34	27	6	29	25	215	135	593	1241
15	2	6	3	24	4	2	56	17	15	10	4	0	0	4	50	26	132	197
60	3	22	87	74	44	15	305	39	40	39	35	7	36	39	235	142	682	1308
17	1	5	4	14	2	2	45	24	23	8	8	0	3	3	69	28	142	230
59	4	18	74	75	44	10	284	49	44	39	36	12	34	26	240	138	662	1385
26	2	2	11	17	7	1	66	20	24	5	9	0	1	4	63	31	160	232
84	9	39	96	89	35	19	371	44	62	49	46	12	40	27	280	159	810	1587
39	6	6	7	18	2	6	84	25	31	10	20	0	3	2	91	50	225	320
78	3	35	99	103	30	25	373	68	66	32	46	17	30	21	280	215	868	1747
23	3	4	9	24	3	2	68	28	29	8	16	0	1	5	87	50	205	311
91	6	36	112	90	53	12	400	69	66	58	54	14	39	46	346	246	992	1973
29	4	8	7	26	3	5	82	39	36	11	7	0	3	5	101	54	237	356
80	4	44	119	99	49	16	411	92	88	53	52	14	60	40	399	248	1058	2014
27	5	7	6	23	9	4	81	36	48	7	7	1	2	4	105	59	245	383
71	14	33	98	118	59	25	418	76	85	55	40	16	41	34	347	219	984	2107
21	8	6	10	30	8	2	85	37	54	5	7	0	4	6	113	41	239	345
101	13	37	108	122	60	26	467	103	119	42	21	18	45	33	381	235	1083	2342
28	4	3	5	26	5	1	72	33	47	9	10	1	0	5	105	45	222	350
89	16	30	82	126	53	21	417	95	129	38	35	25	58	36	416	186	1019	2219
27	4	6	6	30	5	6	84	41	42	7	15	0	3	10	118	60	262	363
83	21	33	94	113	48	8	400	102	137	47	52	27	31	41	437	277	1114	2330
32	9	4	7	23	6	3	84	42	50	8	10	0	4	1	115	77	276	419
79	19	35	101	117	59	9	419	122	123	38	28	15	39	20	385	284	1088	2344
35	5	18	8	28	5	1	100	38	46	5	6	0	3	4	102	73	275	405
81	11	32	115	129	50	7	425	113	118	38	27	16	45	18	375	288	1088	2311
39	3	16	10	31	6	3	108	46	54	5	11	0	0	4	120	73	301	420
88	14	41	104	138	54	12	451	120	120	47	32	28	42	16	405	288	1144	2436
29	10	19	5	31	3	1	98	43	40	9	4	0	2	7	105	79	282	411
95	25	48	110	137	75	21	511	131	132	45	33	22	38	25	426	368	1305	2824
32	3	6	9	27	5	2	84	41	47	6	8	0	3	2	107	96	287	421
91	28	60	152	162	61	15	569	147	128	48	53	24	64	13	477	380	1426	3161
28	3	14	9	23	11	0	88	44	53	6	14	0	0	5	122	97	307	405
98	17	52	127	149	67	13	523	132	109	39	60	25	86	23	474	378	1375	2968
29	7	11	11	18	3	1	80	45	42	6	10	0	5	6	114	112	306	418
62	15	35	75	88	42	11	328	82	68	26	35	19	69	11	310	293	931	2174
28	2	12	7	32	6	0	87	43	45	4	12	1	1	4	110	104	301	390
43	8	24	57	40	35	12	219	46	41	31	20	16	71	6	231	226	676	1611
24	2	9	4	19	1	2	61	26	28	3	9	1	0	10	77	90	228	328

Table 26

ANNUAL AWARDS OF DOCTORATES, 1920-1961, TO MEN AND WOMEN: PHYSICAL AND BIOLOGICAL SCIENCES

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat., Cytol., Embryol.	Physiology & Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology & Entomology	Bio-Sciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
1945	MALE	32	37	281	22	64	436	45	16	5	33	49	32	18	36	10	244	680
	FEMALE	6	6	11	3	1	27	0	2	1	8	23	12	8	11	0	65	92
1946	MALE	44	68	291	35	101	539	39	14	5	28	26	50	18	61	7	248	787
	FEMALE	9	3	31	2	0	45	0	5	1	12	4	10	12	23	1	68	113
1947	MALE	105	140	401	58	116	820	80	21	7	37	40	87	50	111	14	447	1267
	FEMALE	11	8	24	3	0	46	1	4	0	11	5	18	22	16	4	81	127
1948	MALE	110	215	578	64	255	1222	100	35	9	62	76	100	56	130	35	603	1825
	FEMALE	7	9	28	3	2	49	0	2	3	11	15	14	13	27	1	86	135
1949	MALE	136	312	906	114	446	1914	180	42	10	86	111	120	87	191	26	853	2767
	FEMALE	11	7	35	7	2	62	0	1	5	13	12	17	17	23	1	89	151
1950	MALE	166	415	1013	127	466	2187	243	48	15	95	112	166	101	197	21	998	3185
	FEMALE	11	6	37	3	1	58	0	4	5	21	13	21	17	31	1	113	171
1951	MALE	195	487	984	146	585	2397	237	50	21	135	117	145	120	206	52	1083	3480
	FEMALE	9	14	49	2	0	74	0	5	4	26	23	11	24	30	2	125	199
1952	MALE	197	506	1015	148	566	2432	275	58	36	159	139	129	129	255	59	1239	3671
	FEMALE	8	13	49	1	3	74	4	2	2	34	13	16	19	25	3	118	192
1953	MALE	214	517	959	163	568	2421	283	41	31	212	161	185	173	310	53	1449	3870
	FEMALE	12	6	48	4	0	70	1	4	6	23	18	30	22	31	4	139	209
1954	MALE	236	518	979	156	557	2446	310	74	30	188	181	203	144	308	74	1512	3958
	FEMALE	11	9	39	4	2	65	2	8	4	37	21	20	15	26	7	140	205
1955	MALE	232	495	968	177	643	2515	326	94	37	205	188	153	164	289	65	1521	4036
	FEMALE	11	12	42	2	7	74	1	9	4	27	21	13	19	26	9	129	203
1956	MALE	218	475	937	153	576	2359	290	108	36	181	160	143	140	212	113	1383	3742
	FEMALE	10	10	43	3	1	67	7	3	8	21	18	15	13	21	11	117	184
1957	MALE	243	454	987	181	587	2452	272	87	23	211	208	173	156	208	135	1473	3925
	FEMALE	13	8	55	4	3	83	3	10	3	31	29	18	25	25	17	161	244
1958	MALE	226	491	918	196	657	2488	249	76	25	205	205	146	177	207	141	1431	3919
	FEMALE	12	13	41	3	1	70	6	2	11	31	26	11	25	21	21	154	224
1959	MALE	289	512	1030	230	708	2769	292	93	26	238	180	148	145	197	154	1473	4242
	FEMALE	12	11	47	5	2	77	4	2	6	37	28	16	23	23	15	154	231
1960	MALE	271	568	1060	247	821	2967	339	79	31	186	236	183	158	249	165	1626	4593
	FEMALE	19	6	45	3	4	77	7	5	8	10	36	13	21	27	23	150	227
1961	MALE	344	591	1071	256	1002	3264	352	97	34	198	241	169	150	240	136	1617	4881
	FEMALE	18	11	68	2	4	103	1	2	10	30	44	19	31	21	27	185	288
GRAND TOTAL 1920-61	MALE	4549	9345	22515	3635	10167	50211	5072	1626	630	3525	3572	3762	2722	5391	1956	28256	78469
	FEMALE	395	273	1182	108	42	2000	50	149	137	610	562	594	489	736	246	3573	5573

PERCENTAGE OF ALL DOCTORATES AWARDED TO WOMEN BY FIVE-YEAR PERIODS 1920-1961

1920-1924	18.4	7.8	6.4	7.2	1.7	7.6	3.7	5.0	36.0	23.1	20.0	16.0	19.0	13.2	19.1	15.4	10.8
1925-1929	11.8	4.9	8.0	3.1	0.6	6.8	0.6	13.9	3.9	20.4	20.2	23.8	25.0	15.4	12.7	16.3	10.7
1930-1934	15.7	4.4	7.3	5.0	0.7	6.8	1.1	15.8	20.5	17.1	16.6	19.9	19.5	16.9	14.1	15.5	10.3
1935-1939	13.3	3.2	5.8	2.1	0.8	5.3	1.7	10.9	17.2	20.2	19.7	16.4	15.0	15.9	8.6	14.9	9.1
1940-1944	11.8	4.7	3.4	6.3	0.2	4.1	0.3	10.1	22.2	12.8	11.4	16.7	16.6	10.3	6.8	11.3	7.1
1945-1949	9.3	4.1	5.0	5.8	0.5	4.4	0.2	9.9	21.7	18.3	16.3	15.4	23.9	16.0	7.1	14.0	7.8
1950-1954	4.8	1.9	4.3	7.9	0.2	2.8	0.5	7.8	13.6	15.2	11.0	10.6	12.7	10.1	6.2	9.2	5.1
1955-1959	4.6	2.2	4.5	1.8	0.4	2.9	1.4	5.4	17.9	12.4	11.5	8.7	11.8	9.4	10.7	8.9	5.2
1960-1961	5.7	1.4	5.0	1.0	0.4	2.8	1.1	3.8	21.7	9.4	14.4	8.3	14.4	8.9	14.2	9.4	5.2
1920-1961	8.0	2.8	5.0	2.9	0.4	3.8	1.0	8.4	17.9	14.8	13.6	13.6	15.2	12.0	11.2	11.2	6.6

Table 26

ANNUAL AWARDS OF DOCTORATES, 1920-1961, TO MEN AND WOMEN: SOCIAL SCIENCES, ARTS, AND PROFESSIONS

Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, Misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professions	Business Administration	Religion-Theology	Misc. Professions	TOTAL ARTS-PROFESSIONS	Education	TOTAL SOC. SCI.-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
37	4	23	55	54	24	3	200	46	38	20	22	11	77	6	220	196	616	1296
22	5	7	3	15	2	1	55	27	32	6	11	1	3	9	89	97	241	333
56	23	36	76	93	36	9	329	82	41	23	30	11	46	5	238	254	821	1608
28	6	10	8	24	4	0	80	31	30	3	10	3	7	7	91	96	267	380
88	22	64	128	142	56	16	516	114	88	32	57	17	79	10	397	358	1271	2538
34	2	12	9	26	5	2	90	51	31	8	6	1	2	6	105	89	284	411
149	15	61	134	128	101	15	603	120	103	49	79	24	77	22	474	526	1603	3428
30	1	8	12	18	8	4	81	46	31	3	22	1	3	7	113	136	330	465
231	18	87	181	190	131	33	871	149	125	50	70	33	94	26	547	670	2088	4855
44	3	12	9	34	14	5	121	30	32	8	16	6	7	4	103	166	390	541
311	33	113	239	245	149	39	1129	182	162	74	105	54	113	30	720	870	2719	5904
45	10	17	14	25	10	1	122	55	49	15	23	1	2	15	160	160	442	613
419	38	122	288	309	153	50	1379	250	160	76	145	61	130	45	867	928	3174	6654
71	10	19	14	30	12	4	160	47	40	11	28	2	4	6	138	181	479	678
515	29	125	294	267	146	34	1410	223	132	78	175	77	107	36	828	1076	3314	6985
71	10	18	18	30	10	3	160	40	47	8	24	6	8	11	144	229	533	725
575	29	160	300	320	157	53	1594	272	168	102	204	82	94	47	969	1155	3718	7588
81	5	23	12	30	10	5	166	61	34	8	23	3	6	10	145	261	572	781
584	48	169	342	336	179	44	1702	283	170	76	235	85	111	46	1006	1255	3963	7921
81	5	29	12	31	7	6	171	62	45	10	35	4	3	9	168	251	590	795
624	49	158	355	302	202	46	1736	272	165	90	206	93	101	44	971	1290	3997	8033
109	6	30	19	31	12	5	212	56	51	8	30	3	9	13	170	281	663	866
546	50	140	303	230	235	83	1587	287	168	71	195	117	91	48	977	1374	3938	7680
81	7	30	11	34	13	6	182	54	50	7	36	2	6	12	167	260	609	793
589	51	103	293	304	191	57	1588	285	151	84	212	113	120	51	1016	1074	3678	7603
134	14	14	11	35	11	17	236	83	48	8	51	4	3	19	216	301	753	997
647	49	146	314	272	213	76	1717	259	152	99	233	118	120	46	1027	1194	3938	7857
133	24	28	8	42	13	20	268	50	55	4	43	4	11	24	191	300	759	983
674	47	159	326	305	215	73	1799	297	178	102	228	136	126	36	1103	1237	4139	8381
135	20	24	12	46	15	12	264	47	52	13	46	5	8	18	189	293	746	977
613	64	128	357	335	233	90	1820	276	146	107	344	133	141	53	1200	1297	4317	8910
149	11	28	18	30	18	14	268	91	60	25	53	1	8	30	268	327	863	1090
699	51	151	417	335	240	83	1976	363	178	137	291	164	122	57	1312	1452	4740	9621
171	8	32	17	27	24	15	294	81	55	11	64	3	8	34	256	342	892	1180
9042	871	2695	6510	6413	3730	1126	30387	5615	4266	2191	3659	1668	2751	1215	21365	21277	73029	151469
2038	235	516	372	1042	292	170	4665	1652	1571	333	736	54	141	338	4825	5086	14576	20149

PERCENTAGE OF ALL DOCTORATES AWARDED TO WOMEN BY FIVE-YEAR PERIODS 1920-1961

33.6	23.5	13.4	10.4	24.1	5.8	15.4	20.2	30.0	23.8	26.5	20.2	0.0	2.4	10.8	21.4	15.2	19.9	15.1
27.0	33.3	16.4	7.8	20.4	9.7	16.3	17.5	31.2	32.7	18.7	23.3	0.0	5.8	10.2	22.4	19.0	19.6	15.3
23.3	37.5	13.1	6.5	19.5	10.0	11.9	15.8	30.0	33.5	14.3	18.1	2.5	4.4	12.6	22.6	17.6	18.7	14.6
27.8	27.7	26.9	6.8	18.7	8.7	19.7	18.3	27.6	27.0	14.0	20.9	0.0	5.3	16.6	21.7	21.5	20.4	14.8
26.6	15.5	19.2	7.1	17.1	8.5	6.5	15.7	27.0	31.0	11.7	20.9	1.9	2.7	25.7	21.7	23.3	20.0	13.3
22.0	17.2	15.3	6.7	16.2	8.7	13.6	14.5	26.6	28.3	13.9	20.1	11.1	5.6	32.4	21.1	22.6	19.1	13.4
12.7	18.4	13.3	4.6	9.0	5.9	7.9	9.7	18.0	21.4	11.4	13.3	4.3	4.0	20.0	14.7	17.0	13.4	9.3
16.1	22.4	15.1	3.7	11.7	5.7	15.2	12.1	17.2	23.9	8.2	16.1	3.0	6.2	27.7	15.5	18.9	15.2	10.5
19.6	14.2	17.7	4.3	7.8	8.2	14.4	12.9	21.2	26.2	12.9	15.6	1.3	5.7	36.8	17.3	19.6	16.2	10.9
18.4	21.2	16.1	5.4	14.0	7.3	13.1	13.3	22.7	26.9	13.2	16.7	3.1	4.9	21.8	18.4	19.3	16.6	11.7

Table 27

AREA OF BIRTH AND CITIZENSHIP STATUS FOR 1957-1961 DOCTORATES OF FOREIGN ORIGIN

General Region of Birth	Citizenship Status	Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS	General Region of Birth	Citizenship Status	Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
AFRICA	U.S. CITIZEN	3	2	4	6		15	WESTERN EUROPE	U.S. CITIZEN	20	12	18	40	2	92
	NON-U.S. P RES[1]	10	7	6	3	2	28		NON-U.S. P RES	38	9	11	12	1	71
00	NON-U.S. C APP[2]		1	1			2	05	NON-U.S. C APP	1					1
	NON-U.S. OTHER[3]	56	76	50	26	37	245		NON-U.S. OTHER	55	20	13	10	1	99
	UNKNOWN	1	2	5	1		9		UNKNOWN	4	4	1	5		14
	TOTAL	70	88	66	36	39	299		TOTAL	118	45	43	67	4	277
NORTH AMERICA	U.S. CITIZEN	15	29	18	21	14	97	EASTERN EUROPE	U.S. CITIZEN	122	49	109	71	13	364
	NON-U.S. P RES	76	74	66	39	23	278		NON-U.S. P RES	82	23	31	23	1	160
01	NON-U.S. C APP	1	3				4	06	NON-U.S. C APP	6	3	1			10
	NON-U.S. OTHER	233	257	118	50	42	690		NON U.S. OTHER	64	37	35	18	11	165
	UNKNOWN	12	6	10	7	2	37		UNKNOWN	7	3	9	2		21
	TOTAL	327	369	212	117	81	1106		TOTAL	281	115	185	114	25	720
SOUTH AMERICA	U.S. CITIZEN	3	2	5	1		11	WESTERN ASIA	U.S. CITIZEN	21	11	14	7	5	58
	NON-U.S. P RES	14	6	3	5	1	29		NON-U.S. P RES	60	29	38	9	3	139
02	NON-U.S. C APP							07	NON-U.S. C APP	3	3	1			7
	NON-U.S. OTHER	23	29	12	5	4	73		NON-U.S. OTHER	463	403	227	71	85	1249
	UNKNOWN		2	1	1		4		UNKNOWN	15	16	14	4	4	53
	TOTAL	40	39	21	12	5	117		TOTAL	562	462	294	91	97	1506
NORTHERN EUROPE	U.S. CITIZEN	16	16	17	20	7	76	EASTERN ASIA	U.S. CITIZEN	34	9	13	6	3	65
	NON-U.S. P RES	33	18	42	28	1	122		NON-U.S. P RES	132	31	36	13	10	222
03	NON-U.S. C APP				1		1	08	NON-U.S. C APP	8	1				9
	NON-U.S. OTHER	82	52	43	27	8	212		NON-U.S. OTHER	453	169	132	38	47	839
	UNKNOWN	3	4	5	4		16		UNKNOWN	12	4	4	2	2	24
	TOTAL	134	90	107	80	16	427		TOTAL	639	214	185	59	62	1159
CENTRAL EUROPE	U.S. CITIZEN	63	21	91	72	9	256	AUSTRALASIA	U.S. CITIZEN	4	4	5	2	1	16
	NON-U.S. P RES	44	23	34	25	3	129		NON-U.S. P RES	10	5	11	4	4	34
04	NON-U.S. C APP		1	2			3	09	NON-U.S. C APP	1				1	2
	NON-U.S. OTHER	58	33	28	19	3	141		NON-U.S. OTHER	70	91	54	32	71	318
	UNKNOWN	12	4	7	7	1	31		UNKNOWN	2	1	2	1	2	8
	TOTAL	177	82	162	123	16	560		TOTAL	87	101	72	39	79	378
								GRAND TOTAL	U.S. CITIZEN	301	155	294	246	54	1050
									NON-U.S. P RES	499	225	278	161	49	1212
									NON-U.S. C APP	20	12	5	1	1	39
									NON-U.S. OTHER	1547	1167	712	296	309	4031
									UNKNOWN	68	46	58	34	11	217
									TOTAL	2435	1605	1347	738	424	6549

1. Non-U.S., Permanent Resident
2. Non-U.S., Citizenship Applied for
3. Usually means on temporary visa

APPENDIX

The pages that follow contain the more detailed tables referred to in the main text, and listed in the Table of Contents. Because it was necessary to "freeze" the computer tape record before all the reports had been received from institutions to which records were sent for verification, some errors were retained in the detailed tables. The major errors, where known at the time of publication, are given below. There were in addition, a number of minor errors--a few cases per institution--which would make no appreciable difference in the large schools. In a book of this size and scope, some errors are practically inevitable, in spite of all efforts to eliminate them. If any readers should discover additional errors that have not previously been reported to the Office of Scientific Personnel, the authors of this book will be most grateful for receiving notification of them.

ERRATA

One undergraduate institution, Cornell College of Iowa, is frequently confused with Cornell University. In addition to the 208 graduates shown in the table of baccalaureate origins (Appendix 4) ten (10) additional graduates were discovered who received doctorate degrees between 1920 and 1961.

The following institutions of doctorate were found to have more graduates than shown in the main tables. The identification number of each institution, its name, and the number of additional doctorates that should be credited to it are shown in the following table.

9356	California, University of, Berkeley	12
2116	Columbia University	156
9300	Hebrew Union (California)	2
7459	Houston, University of	33
2132	Jewish Theological Seminary	10
5206	Johns Hopkins University	44
3512	Marquette University	62
3235	Notre Dame, University of	18
2046	Syracuse College of Forestry	20
7401	Texas A. & M.	22

Appendix 1

DOCTORATE PRODUCTION BY STATES AND REGIONS IN TEN FIELDS, BY DECADE

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PSYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
MAINE 11	1960-61			3			3		3						3
TOTAL,	1920-61			3			3		3						3
NEW HAMPSHIRE	1950-59			8			8	7	15						15
12	1960-61			13			13	5	18						18
TOTAL,	1920-61			21			21	12	33						33
VERMONT	1930-39											1		1	1
	1940-49							1	1			6		6	7
	1950-59											19		19	19
13	1960-61											4		4	4
TOTAL,	1920-61							1	1			30		30	31
MASSACHUSETTS	1920-29	33	39	147	38	45	302	114	416	20	254	411	88	773	1189
	1930-39	82	139	308	95	128	752	238	990	47	541	649	70	1307	2297
	1940-49	93	246	406	98	291	1134	262	1396	81	583	521	125	1310	2706
14	1950-59	187	606	645	189	808	2435	536	2971	335	1388	1094	542	3359	6330
	1960-61	54	115	178	54	204	605	97	702	109	311	286	158	864	1566
TOTAL,	1920-61	449	1145	1684	474	1476	5228	1247	6475	592	3077	2961	983	7613	14088
RHODE ISLAND	1920-29	1		19			20	19	39	1	7	6	4	18	57
	1930-39	24	15	43			82	31	113	6	8	31		45	158
	1940-49	36	26	47			109	24	133	17	13	35		65	198
15	1950-59	81	56	74	1	6	218	39	257	23	35	65		123	380
	1960-61	16	12	17		3	48	11	59	8	12	23		43	102
TOTAL,	1920-61	158	109	200	1	9	477	124	601	55	75	160	4	294	895
CONNECTICUT	1920-29	10	32	101	24	2	169	140	309	14	53	196	35	298	607
	1930-39	20	52	132	27	42	273	195	468	60	156	390	124	730	1198
	1940-49	13	62	118	22	71	286	145	431	50	143	332	91	616	1047
16	1950-59	49	164	242	64	122	641	288	929	131	322	638	182	1273	2202
	1960-61	13	37	49	12	30	141	58	199	40	82	186	36	344	543
TOTAL,	1920-61	105	347	642	149	267	1510	826	2336	295	756	1742	468	3261	5597
TOTAL, NEW ENGLAND	1920-29	44	71	267	62	47	491	273	764	35	314	613	127	1089	1853
	1930-39	126	206	483	122	170	1107	464	1571	113	705	1071	194	2083	3654
	1940-49	142	334	571	120	362	1529	432	1961	148	739	894	216	1997	3958
	1950-59	317	826	969	254	936	3302	870	4172	489	1745	1816	724	4774	8946
	1960-61	83	164	260	66	237	810	171	981	157	405	499	194	1255	2236
TOTAL,	1920-61	712	1601	2550	624	1752	7239	2210	9449	942	3908	4893	1455	11198	20647
NEW YORK	1920-29	41	86	338	38	62	565	352	917	159	405	504	477	1545	2462
	1930-39	85	176	562	77	121	1021	777	1798	222	642	900	1304	3068	4866
	1940-49	95	158	720	77	186	1236	924	2160	239	618	809	1777	3443	5603
21	1950-59	246	652	1181	207	662	2948	1638	4586	1095	1745	1958	4134	8932	13518
	1960-61	71	141	233	41	199	685	357	1042	304	464	460	763	1991	3033
TOTAL,	1920-61	538	1213	3034	440	1230	6455	4048	10503	2019	3874	4631	8455	18979	29482
NEW JERSEY	1920-29	14	36	53	21	2	126	52	178	10	27	59		96	274
	1930-39	40	44	101	49	2	236	94	330	13	76	155	13	257	587
	1940-49	61	39	137	32	21	290	116	406	25	71	156	21	273	679
22	1950-59	119	159	230	82	98	688	401	1089	51	205	259	82	597	1686
	1960-61	25	39	64	18	43	189	94	283	22	76	59	22	179	462
TOTAL,	1920-61	259	317	585	202	166	1529	757	2286	121	455	688	138	1402	3688

Appendix 1

DOCTORATE PRODUCTION BY STATES AND REGIONS IN TEN FIELDS, BY DECADE

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PSYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
PENNSYLVANIA	1920-29	19	19	89	3	5	135	52	187	36	126	133	60	355	542
	1930-39	43	61	193	7	39	343	249	592	54	239	363	264	920	1512
	1940-49	41	92	391	7	121	652	265	917	62	204	257	372	895	1812
23	1950-59	128	321	689	73	484	1695	621	2316	424	609	524	921	2478	4794
	1960-61	36	100	171	38	173	518	163	681	91	132	171	183	577	1258
TOTAL,	1920-61	267	593	1533	128	822	3343	1350	4693	667	1310	1448	1800	5225	9918
TOTAL, MIDDLE ATLANTIC	1920-29	74	141	480	62	69	826	456	1282	205	558	696	537	1996	3278
	1930-39	168	281	856	133	162	1600	1120	2720	289	957	1418	1581	4245	6965
	1940-49	197	289	1248	116	328	2178	1305	3483	326	893	1222	2170	4611	8094
	1950-59	493	1132	2100	362	1244	5331	2660	7991	1570	2559	2741	5137	12007	19998
	1960-61	132	280	468	97	415	1392	614	2006	417	672	690	968	2747	4753
TOTAL,	1920-61	1064	2123	5152	770	2218	11327	6155	17482	2807	5639	6767	10393	25606	43088
OHIO	1920-29	1	16	115		16	148	93	241	39	22	15	45	121	362
	1930-39	42	52	266	10	59	429	240	669	94	124	137	171	526	1195
	1940-49	31	71	374	10	87	573	292	865	97	150	151	237	635	1500
31	1950-59	52	195	558	43	276	1124	690	1814	429	291	458	429	1607	3421
	1960-61	25	45	126	9	78	283	138	421	80	95	133	88	396	817
TOTAL,	1920-61	151	379	1439	72	516	2557	1453	4010	739	682	894	970	3285	7295
INDIANA	1920-29	1	11	21	2	2	37	13	50	11	16	18	13	58	108
	1930-39	7	46	150	6	10	219	48	267	15	16	15	30	76	343
	1940-49	19	56	357	4	63	499	127	626	73	59	44	89	265	891
32	1950-59	105	183	666	24	346	1324	645	1969	379	317	379	650	1725	3694
	1960-61	33	41	141	8	112	335	166	501	78	94	141	193	506	1007
TOTAL,	1920-61	165	337	1335	44	533	2414	999	3413	556	502	597	975	2630	6043
ILLINOIS	1920-29	116	122	301	55	5	599	351	950	131	274	371	33	809	1759
	1930-39	146	131	563	68	30	938	563	1501	118	470	679	98	1365	2866
	1940-49	93	167	756	79	100	1195	550	1745	103	576	709	276	1664	3409
33	1950-59	235	404	1027	173	632	2471	1142	3613	570	1292	1252	669	3783	7396
	1960-61	50	85	198	62	218	613	256	869	131	261	242	162	796	1665
TOTAL,	1920-61	640	909	2845	437	985	5816	2862	8678	1053	2873	3253	1238	8417	17095
MICHIGAN	1920-29	11	50	45	14	32	152	83	235	17	62	60	18	157	392
	1930-39	59	93	121	25	135	433	280	713	36	110	119	56	321	1034
	1940-49	45	66	153	20	83	367	293	660	44	123	144	110	421	1081
34	1950-59	121	165	426	55	397	1164	958	2122	375	401	481	644	1901	4023
	1960-61	24	39	98	21	113	295	233	528	129	131	188	192	640	1168
TOTAL,	1920-61	260	413	843	135	760	2411	1847	4258	601	827	992	1020	3440	7698
WISCONSIN	1920-29	8	26	151	16	12	213	223	436	4	196	82	28	310	746
	1930-39	33	60	256	34	30	413	406	819	18	237	220	58	533	1352
	1940-49	40	60	295	21	53	469	578	1047	8	251	183	98	540	1587
35	1950-59	64	132	431	94	231	952	1265	2217	88	585	437	243	1353	3570
	1960-61	13	21	90	21	69	214	267	481	25	109	126	73	333	814
TOTAL,	1920-61	158	299	1223	186	395	2261	2739	5000	143	1378	1048	500	3069	8069
TOTAL, EAST NORTH CENTRAL	1920-29	137	225	633	87	67	1149	763	1912	202	570	546	137	1455	3367
	1930-39	287	382	1356	143	264	2432	1537	3969	281	957	1170	413	2821	6790
	1940-49	228	420	1935	134	386	3103	1840	4943	325	1159	1231	810	3525	8468
	1950-59	577	1079	3108	389	1882	7035	4700	11735	1841	2886	3007	2635	10369	22104
	1960-61	145	231	653	121	590	1740	1060	2800	443	690	830	708	2671	5471
TOTAL,	1920-61	1374	2337	7685	874	3189	15459	9900	25359	3092	6262	6784	4703	20841	46200
MINNESOTA	1920-29	7	21	34	18	3	83	168	251	27	41	15	25	108	359
	1930-39	7	26	102	31	31	197	343	540	65	94	38	37	234	774
	1940-49	18	13	143	14	47	235	442	677	88	133	56	66	343	1020
41	1950-59	52	51	216	37	140	496	743	1239	271	318	192	181	962	2201
	1960-61	8	13	37	4	34	96	147	243	52	60	70	52	234	477
TOTAL,	1920-61	92	124	532	104	255	1107	1843	2950	503	646	371	361	1881	4831

Appendix 1

DOCTORATE PRODUCTION BY STATES AND REGIONS IN TEN FIELDS, BY DECADE

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PSYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
IOWA	1920-29	8	22	95	17	3	145	112	257	63	66	37	81	247	504
	1930-39	25	46	237	24	41	373	357	730	142	132	150	106	530	1260
	1940-49	35	26	235	23	51	370	379	749	103	132	234	82	551	1300
42	1950-59	67	109	376	24	210	786	774	1560	189	301	432	298	1220	2780
	1960-61	17	23	96	10	54	200	168	368	40	50	106	56	252	620
TOTAL,	1920-61	152	226	1039	98	359	1874	1790	3664	537	681	959	623	2800	6464
MISSOURI	1920-29	7	5	4	3		19	61	80	1	9	3	11	24	104
	1930-39	18	29	39	12	2	100	134	234	4	59	58	60	181	415
	1940-49	8	29	64	9	7	117	119	236	3	69	39	116	227	463
43	1950-59	42	133	186	39	84	484	336	820	98	175	144	345	762	1582
	1960-61	13	22	26	8	26	95	70	165	20	51	45	81	197	362
TOTAL,	1920-61	88	218	319	71	119	815	720	1535	126	363	289	613	1391	2926
NORTH DAKOTA	1920-29										1		1	2	2
	1930-39			1			1		1	10	5	1	14	30	31
	1940-49									3	2		5	10	10
44	1950-59					2	2	5	7	9	1	1	45	56	63
	1960-61							1	1	3			14	17	18
TOTAL,	1920-61			1		2	3	6	9	25	9	2	79	115	124
SOUTH DAKOTA	1950-59							2	2		1		3	4	6
45	1960-61							8	8		2		5	7	15
TOTAL,	1920-61							10	10		3		8	11	21
NEBRASKA	1920-29	1	1	15	1		18	11	29		3	6	5	14	43
	1930-39	4	1	47			52	37	89	13	29	8	20	70	159
	1940-49	3		38	2		43	48	91	15	25	8	56	104	195
46	1950-59	2	10	58	4		74	100	174	84	83	22	139	328	502
	1960-61	3	3	12	5		23	32	55	9	13	7	60	89	144
TOTAL,	1920-61	13	15	170	12		210	228	438	121	153	51	280	605	1043
KANSAS	1920-29	2	1	17			20	21	41		2		4	6	47
	1930-39	1	8	33	4		46	37	83	16	10	5	9	40	123
	1940-49	1		36	5		42	39	81	7	5	2	23	37	118
47	1950-59	19	35	170	15	9	248	242	490	76	32	28	118	254	744
	1960-61	4	8	52	9	5	78	64	142	14	3	13	40	70	212
TOTAL,	1920-61	27	52	308	33	14	434	403	837	113	52	48	194	407	1244
TOTAL, WEST NORTH CENTRAL	1920-29	25	50	165	39	6	285	373	658	91	122	61	127	401	1059
	1930-39	55	110	459	71	74	769	908	1677	250	329	260	246	1085	2762
	1940-49	65	68	516	53	105	807	1027	1834	219	366	339	348	1272	3106
	1950-59	182	338	1006	119	445	2090	2202	4292	727	911	819	1129	3586	7878
	1960-61	45	69	223	36	119	492	490	982	138	179	241	308	866	1848
TOTAL,	1920-61	372	635	2369	318	749	4443	5000	9443	1425	1907	1720	2158	7210	16653
DELAWARE	1940-49			9		8	17		17						17
	1950-59			142		48	190	2	192						192
	1960-61			23		9	32	7	39						39
51 TOTAL,	1920-61			174		65	239	9	248						248
MARYLAND	1920-29	23	47	138	29	10	247	250	497	40	90	68	14	212	709
	1930-39	17	41	205	22	39	324	320	644	30	126	144	32	332	976
	1940-49	11	42	149	24	52	278	217	495	15	69	98	26	208	703
52	1950-59	30	152	185	45	151	563	478	1041	86	164	157	133	540	1581
	1960-61	12	49	39	13	40	153	90	243	20	47	41	39	147	390
TOTAL,	1920-61	93	331	716	133	292	1565	1355	2920	191	496	508	244	1439	4359

Appendix 1

DOCTORATE PRODUCTION BY STATES AND REGIONS IN TEN FIELDS, BY DECADE

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PSYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
D.C.	1920-29	4	4	27	11	4	50	42	92	19	75	155	40	289	381
	1930-39	16	12	36	4	5	73	65	138	19	145	266	71	501	639
	1940-49	16	16	38	4		74	58	132	34	196	402	87	719	851
53	1950-59	33	84	162		5	284	221	505	106	444	382	131	1063	1568
	1960-61	9	13	19		2	43	49	92	22	96	63	26	207	299
TOTAL,	1920-61	78	129	282	19	16	524	435	959	200	956	1268	355	2779	3738
VIRGINIA	1920-29		9	17	1		27	6	33		7	27	2	36	69
	1930-39	8	24	49			81	37	118	8	36	45	10	99	217
	1940-49	14	35	57		4	110	27	137	5	49	39	5	98	235
54	1950-59	29	75	93	3	33	233	60	293	16	89	46	40	191	484
	1960-61	17	24	16	3	9	69	16	85	4	27	10	20	61	146
TOTAL,	1920-61	68	167	232	7	46	520	146	666	33	208	167	77	485	1151
WEST VIRGINIA	1930-39	2		15		2	19	12	31		1	1	1	3	34
	1940-49	1	1	11	1	1	15	8	23		3			3	26
	1950-59			21	2	19	42	26	68		9		4	13	81
55	1960-61			2		2	4	4	8		1		1	2	10
TOTAL,	1920-61	3	1	49	3	24	80	50	130		14	1	6	21	151
NORTH CAROLINA	1920-29			22	2		24	5	29	1	21	25	3	50	79
	1930-39	12	27	75	4	1	119	54	173	29	116	104	22	271	444
	1940-49	35	20	113	8		176	107	283	26	139	133	23	321	604
56	1950-59	113	108	181	9	27	438	374	812	105	381	305	116	907	1719
	1960-61	19	28	28	2	8	85	113	198	29	84	84	46	243	441
TOTAL,	1920-61	179	183	419	25	36	842	653	1495	190	741	651	210	1792	3287
SOUTH CAROLINA	1920-29										2	3	5	10	10
	1930-39											3	3	6	6
	1940-49										1			1	1
57	1950-59			11			11	11	22		8	3	6	17	39
	1960-61			5			5	10	15	1	1	1	2	5	20
TOTAL,	1920-61			16			16	21	37	1	12	10	16	39	76
GEORGIA	1940-49			3			3	1	4		1		4	5	9
	1950-59	12	3	60		40	115	47	162	6	20	17	31	74	236
	1960-61	2	7	15		15	39	14	53	4	11	16	12	43	96
58 TOTAL,	1920-61	14	10	78		55	157	62	219	10	32	33	47	122	341
FLORIDA	1930-39			14			14	14	28						28
	1940-49			12			12	22	34		1	1	5	7	41
	1950-59	33	18	148	6	16	221	158	379	86	71	118	178	453	832
59	1960-61	8	5	39	1	23	76	67	143	27	30	47	79	183	326
TOTAL,	1920-61	41	23	213	7	39	323	261	584	113	102	166	262	643	1227
TOTAL, SOUTH ATLANTIC	1920-29	27	60	204	43	14	348	303	651	60	195	278	64	597	1248
	1930-39	55	104	394	30	47	630	502	1132	86	424	563	139	1212	2344
	1940-49	77	114	392	37	65	685	440	1125	80	459	673	150	1362	2487
	1950-59	250	440	1003	65	339	2097	1377	3474	405	1186	1028	639	3258	6732
	1960-61	67	126	186	19	108	506	370	876	107	297	262	225	891	1767
TOTAL,	1920-61	476	844	2179	194	573	4266	2992	7258	738	2561	2804	1217	7320	14578
KENTUCKY	1930-39	6	2	2			10		10	9	8	1	15	33	43
	1940-49	7	1	2			10	1	11	6	11	5	23	45	56
	1950-59	16	9	62		6	93	10	103	70	50	21	64	205	308
61	1960-61	3	2	24		4	33	13	46	9	12	2	16	39	85
TOTAL,	1920-61	32	14	90		10	146	24	170	94	81	29	118	322	492

Appendix 1

DOCTORATE PRODUCTION BY STATES AND REGIONS IN TEN FIELDS, BY DECADE

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PSYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
TENNESSEE	1920-29	2					2	7	9	13	6	18	40	77	86
	1930-39	3		10	1		14	16	30	22	52	45	133	252	282
	1940-49	5		17			22	11	33	5	29	46	129	209	242
62	1950-59	35	70	135	1	17	258	115	373	120	74	127	304	625	998
	1960-61	3	12	28	1	5	49	28	77	30	12	30	92	164	241
TOTAL,	1920-61	48	82	190	3	22	345	177	522	190	173	266	698	1327	1849
ALABAMA	1950-59	6	6	17			29	34	63		14	20	48	82	145
63	1960-61	10	6	8			24	17	41	2	6	9	38	55	96
TOTAL,	1920-61	16	12	25			53	51	104	2	20	29	86	137	241
MISSISSIPPI	1950-59							13	13				30	30	43
64	1960-61			2		1	3	6	9		1	1	7	9	18
TOTAL,	1920-61			2		1	3	19	22		1	1	37	39	61
TOTAL, EAST SOUTH CENTRAL	1920-29	2					2	7	9	13	6	18	40	77	86
	1930-39	9	2	12	1		24	16	40	31	60	46	148	285	325
	1940-49	12	1	19			32	12	44	11	40	51	152	254	298
	1950-59	57	85	214	1	23	380	172	552	190	138	168	446	942	1494
	1960-61	16	20	62	1	10	109	64	173	41	31	42	153	267	440
TOTAL,	1920-61	96	108	307	3	33	547	271	818	286	275	325	939	1825	2643
ARKANSAS	1950-59			20			20	4	24		5	8	53	66	90
71	1960-61			7			7	2	9		5	7	24	36	45
TOTAL,	1920-61			27			27	6	33		10	15	77	102	135
LOUISIANA	1920-29							6	6		1	1		2	8
	1930-39	1		8	4		13	16	29		5	16	6	27	56
	1940-49	3		31	10	4	48	38	86	5	28	32	11	76	162
72	1950-59	30	23	101	20	17	191	177	368	49	83	117	55	304	672
	1960-61	9	9	16	9	4	47	54	101	22	34	35	15	106	207
TOTAL,	1920-61	43	32	156	43	25	299	291	590	76	151	201	87	515	1105
OKLAHOMA	1920-29							1	1						1
	1930-39		1		2		3	10	13		10		27	37	50
	1940-49	1	9	4	2		16	6	22	1	5	3	35	44	66
73	1950-59	21	25	77	12	26	161	143	304	41	36	19	222	318	622
	1960-61	11	4	8	5	19	47	58	105	17	17	8	75	117	222
TOTAL,	1920-61	33	39	89	21	45	227	218	445	59	68	30	359	516	961
TEXAS	1920-29	13	6	5			24	3	27		8	4	7	19	46
	1930-39	20	24	56	3	2	105	45	150	5	65	36	41	147	297
	1940-49	18	26	103	6	21	174	61	235	11	94	50	105	260	495
74	1950-59	60	174	282	41	144	701	387	1088	211	212	249	383	1055	2143
	1960-61	16	37	50	25	33	161	101	262	66	36	78	101	281	543
TOTAL,	1920-61	127	267	496	75	200	1165	597	1762	293	415	417	637	1762	3524
TOTAL, WEST SOUTH CENTRAL	1920-29	13	6	5			24	10	34		9	5	7	21	55
	1930-39	21	25	64	9	2	121	71	192	5	80	52	74	211	403
	1940-49	22	35	138	18	25	238	105	343	17	127	85	151	380	723
	1950-59	111	222	480	73	187	1073	711	1784	301	336	393	713	1743	3527
	1960-61	36	50	81	39	56	262	215	477	105	92	128	215	540	1017
TOTAL,	1920-61	203	338	768	139	270	1718	1112	2830	428	644	663	1160	2895	5725

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DOCTORATE PRODUCTION BY STATES AND REGIONS IN TEN FIELDS, BY DECADE

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PSYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
MONTANA	1950-59			4		7	11	3	14				5	5	19
81	1960-61			7		4	11	3	14				4	4	18
	TOTAL, 1920-61			11		11	22	6	28				9	9	37
WYCMING	1940-49												9	9	9
	1950-59			9	8		17	15	32	1			78	79	111
	1960-61			1	4		5	4	9	3			16	19	28
83	TOTAL, 1920-61			10	12		22	19	41	4			103	107	148
COLORADO	1920-29		2	11		4	17	6	23	1	1	1	2	5	28
	1930-39	4	3	35	18	2	62	32	94		9	2	29	40	134
	1940-49	1	6	37	11	2	57	27	84	1	20	18	132	171	255
84	1950-59	10	24	103	42	48	227	82	309	176	63	170	529	938	1247
	1960-61	8	13	25	12	12	70	22	92	35	18	41	186	280	372
	TOTAL, 1920-61	23	48	211	83	68	433	169	602	213	111	232	878	1434	2036
NEW MEXICO	1940-49										4	2		6	6
	1950-59		6	31	1		38	10	48		31	29		60	108
	1960-61	2	6	6		2	16		16		5	10	6	21	37
85	TOTAL, 1920-61	2	12	37	1	2	54	10	64		40	41	6	87	151
ARIZONA	1920-29							3	3						3
	1930-39			3	7		10	1	11				3	3	14
	1940-49			2	12		14	6	20				4	4	24
86	1950-59			2	21	1	24	12	36	2	14		25	41	77
	1960-61			6	6	3	15	16	31	6	6		22	34	65
	TOTAL, 1920-61			13	46	4	63	38	101	8	20		54	82	183
UTAH	1940-49			5		6	11	4	15	2	1	2		5	20
	1950-59	4	31	81	28	67	211	99	310	48	30	29	64	171	481
	1960-61	2	9	16	11	23	61	44	105	11	2	6	15	34	139
87	TOTAL, 1920-61	6	40	102	39	96	283	147	430	61	33	37	79	210	640
TOTAL,	1920-29		2	11		4	17	9	26	1	1	1	2	5	31
MOUNTAIN	1930-39	4	3	38	25	2	72	33	105		9	2	32	43	148
	1940-49	1	6	44	23	8	82	37	119	3	25	22	145	195	314
	1950-59	14	61	230	100	123	528	221	749	227	138	228	701	1294	2043
	1960-61	12	28	61	33	44	178	89	267	55	31	57	249	392	659
	TOTAL, 1920-61	31	100	384	181	181	877	389	1266	286	204	310	1129	1929	3195
WASHINGTON	1920-29	2		6	1	4	13	9	22	2	4	19	17	42	64
	1930-39	4	15	46	4	2	71	83	154		30	44	34	108	262
	1940-49	5	17	69	2		93	83	176	1	35	37	35	108	284
91	1950-59	33	53	212	53	36	387	301	688	86	190	130	143	549	1237
	1960-61	10	24	55	11	14	114	66	180	34	43	46	32	155	335
	TOTAL, 1920-61	54	109	388	71	56	678	542	1220	123	302	276	261	962	2182
OREGON	1920-29				1		1		1				2	2	3
	1930-39		3	3	1		7	15	22		1	5	14	20	42
	1940-49	2	2	25		1	30	40	70		2		36	38	108
92	1950-59	36	26	98		14	174	224	398	26	41	8	224	299	697
	1960-61	10	4	27		1	42	70	112	15	18	5	53	91	203
	TOTAL, 1920-61	48	35	153	2	16	254	349	603	41	62	18	329	450	1053

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DOCTORATE PRODUCTION BY STATES AND REGIONS IN TEN FIELDS, BY DECADE

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PSYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
CALIFORNIA	1920-29	27	96	153	37	16	329	166	495	34	151	79	86	350	845
	1930-39	51	205	251	90	83	680	340	1020	76	360	211	222	869	1889
	1940-49	84	197	369	63	132	845	559	1404	119	402	271	519	1311	2715
93	1950-59	254	709	815	289	704	2771	1464	4235	563	1027	835	1479	3904	8139
	1960-61	96	179	166	82	237	760	362	1122	119	268	238	313	938	2060
TOTAL,	1920-61	512	1386	1754	561	1172	5385	2891	8276	911	2208	1634	2619	7372	15648
ALASKA	1950-59		1		3		4		4						4
94	1960-61		1		3		4		4						4
TOTAL,	1920-61		2		6		8		8						8
HAWAII	1930-39			1			1	1	2						2
	1950-59			5			5	10	15						15
	1960-61			2			2	7	9	1				1	10
95 TOTAL,	1920-61			8			8	18	26	1				1	27
TOTAL, PACIFIC	1920-29	29	96	159	39	20	343	175	518	36	155	98	105	394	912
	1930-39	55	223	301	95	85	759	439	1198	76	391	260	270	997	2195
	1940-49	91	216	463	65	133	968	682	1650	120	439	308	590	1457	3107
	1950-59	323	789	1130	345	754	3341	1999	5340	675	1258	973	1846	4752	10092
	1960-61	116	208	250	96	252	922	505	1427	169	329	289	398	1185	2612
TOTAL,	1920-61	614	1532	2303	640	1244	6333	3800	10133	1076	2572	1928	3209	8785	18918
GRAND TOTAL ALL REGIONS	1920-29	351	651	1924	332	227	3485	2369	5854	643	1930	2316	1146	6035	11889
	1930-39	780	1336	3963	629	806	7514	5090	12604	1131	3912	4842	3097	12982	25586
	1940-49	835	1483	5326	566	1412	9622	5880	15502	1249	4247	4825	4732	15053	30555
	1950-59	2324	4972	10240	1708	5933	25177	14912	40089	6425	11157	11173	13970	42725	82814
	1960-61	652	1176	2243	508	1831	6410	3578	9988	1632	2726	3038	3418	10814	20803
TOTAL,	1920-61	4942	9618	23696	3743	10209	52208	31829	84037	11080	23972	26194	26363	87609	171647

Appendix 2

DOCTORATE PRODUCTION BY INSTITUTION IN FIVE FIELDS, BY DECADE

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
ACELPHI COLLEGE	1950-59			41			41
	1960-61	1		22			23
2101	TOTAL, 1920-61	1		63			64
AGR & MECH COLL	1940-49	6	7	2			15
OF TEXAS	1950-59	85	173	9			267
	1960-61	24	35	5			64
7401							
	TOTAL, 1920-61	115	215	16			346
UNIVERSITY OF	1950-59	5					5
AKRON	1960-61	14					14
3155	TOTAL, 1920-61	19					19
UNIVERSITY OF	1950-59	23	18	14	20	26	101
ALABAMA	1960-61	10	13	8	9	14	54
6325	TOTAL, 1920-61	33	31	22	29	40	155
UNIVERSITY OF	1950-59	4					4
ALASKA	1960-61	4					4
9400	TOTAL, 1920-61	8					8
ALFREC	1950-59	3					3
UNIVERSITY	1960-61	3					3
2102	TOTAL, 1920-61	6					6
AMERICAN	1920-29	5	6	16	31	6	64
UNIVERSITY	1930-39	18	4	35	17	6	80
	1940-49			31			31
5301	1950-59	5		188		6	199
	1960-61	2		45	1	4	52
	TOTAL, 1920-61	30	10	315	49	22	426
ARIZONA STATE	1950-59					15	15
UNIVERSITY	1960-61					9	9
8603	TOTAL, 1920-61					24	24
UNIVERSITY OF	1920-29		3				3
ARIZCNA	1930-39	10	1			3	14
	1940-49	14	6			4	24
8604	1950-59	24	12	16		10	62
	1960-61	15	16	12		13	56
	TOTAL, 1920-61	63	38	28		30	159

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
UNIVERSITY OF	1950-59	20	4	5	8	53	90
ARKANSAS	1960-61	7	2	5	7	24	45
7120	TOTAL, 1920-61	27	6	10	15	77	135
AUBURN	1950-59	6	16			22	44
UNIVERSITY	1960-61	14	4			24	42
6302	TOTAL, 1920-61	20	20			46	86
BAYLOR	1950-59	9	13			9	31
UNIVERSITY	1960-61	3	12	2		5	22
7406	TOTAL, 1920-61	12	25	2		14	53
BCSTON COLLEGE	1920-29					1	1
	1930-39		2	13	34	15	64
	1940-49	1		3	6		10
1408	1950-59			6		2	8
	1960-61			4		5	9
	TOTAL, 1920-61	1	2	26	40	23	92
BCSTON	1920-29		2	2	36	2	42
UNIVERSITY	1930-39	13	12	6	70	7	108
	1940-49	10	13	21	104	39	187
1409	1950-59	64	64	146	256	233	763
	1960-61	25	12	55	72	73	237
	TOTAL, 1920-61	112	103	230	538	354	1337
BRANDEIS	1950-59		1	5	5		11
UNIVERSITY	1960-61	9	3	12	7		31
1465	TCTAL, 1920-61	9	4	17	12		42
BRIGHAM YCUNG	1960-61	1	2			2	5
UNIVERSITY							
8701	TCTAL, 1920-61	1	2			2	5
BRCWN	1920-29	20	19	8	6	4	57
UNIVERSITY	1930-39	82	31	14	31		158
	1940-49	109	24	30	35		198
1501	1950-59	218	39	58	65		380
	1960-61	42	10	20	23		95
	TOTAL, 1920-61	471	123	130	160	4	888
BRYN MAWR	1920-29	12	5	16	19		52
COLLEGE	1930-39	14	5	33	35		87
	1940-49	20	6	24	38	2	90
2305	1950-59	16	3	29	35		83
	1960-61	5	1	6	17		29
	TOTAL, 1920-61	67	20	108	144	2	341

DOCTORATE PRODUCTION BY INSTITUTION IN FIVE FIELDS, BY DECADE

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
UNIVERSITY OF	1930-39	7	3	1		5	16
BUFFALO	1940-49	11	1	2		1	15
	1950-59	65	23	40	13	147	288
2193	1960-61	18	9	16	3	25	71
TOTAL,	1920-61	101	36	59	16	178	390
CALIFORNIA INST	1920-29	81	1				82
OF TECHNOLOGY	1930-39	253	21				274
	1940-49	237	46				283
9305	1950-59	563	69				632
	1960-61	126	12				138
TOTAL,	1920-61	1260	149				1409
UNIV OF CALI-	1920-29	183	118	119	47	53	520
FORNIA BERK	1930-39	289	235	253	117	93	987
	1940-49	346	356	227	111	91	1131
9356	1950-59	1049	714	667	225	268	2923
	1960-61	309	152	140	52	59	712
TOTAL,	1920-61	2176	1575	1406	552	564	6273
UNIV OF CALI-	1940-49		3				3
FORNIA DAVIS	1950-59	24	200				224
	1960-61	12	66				78
9366 TOTAL,	1920-61	36	269				305
UNIV OF CALI-	1930-39		1	5			6
FORNIA L A	1940-49	72	46	79	26	40	263
	1950-59	435	217	296	94	190	1232
9365	1960-61	103	64	88	32	67	354
TOTAL,	1920-61	610	328	468	152	297	1855
UNIV OF CALI	1960-61	3	7				10
FORNIA SAN FR							
9367 TOTAL,	1920-61	3	7				10
CARNEGIE INST	1920-29	1		4			5
OF TECHNOLOGY	1930-39	24					24
	1940-49	96					96
2307	1950-59	399		13	4		416
	1960-61	91		5	3		99
TOTAL,	1920-61	611		22	7		640
CASE INSTITUTE	1930-39	1					1
OF TECHNOLOGY	1940-49	31					31
	1950-59	156					156
3109	1960-61	76					76
TOTAL,	1920-61	264					264
CATHOLIC UNIV	1920-29	16	11	50	115	27	219
OF AMERICA	1930-39	37	22	88	233	50	430
	1940-49	47	21	149	387	49	653
5302	1950-59	150	46	183	331	87	797
	1960-61	29	20	32	52	18	151
TOTAL,	1920-61	279	120	502	1118	231	2250
UNIVERSITY OF	1920-29	373	232	322	306	10	1243
CHICAGO	1930-39	420	300	311	466	42	1539
	1940-49	370	255	450	385	155	1615
3387	1950-59	536	319	1061	424	226	2566
	1960-61	97	46	181	70	35	429
TOTAL,	1920-61	1796	1152	2325	1651	468	7392
UNIVERSITY OF	1920-29	8	11	1		12	32
CINCINNATI	1930-39	60	38	8	22	33	161
	1940-49	108	21	6	24	29	188
3156	1950-59	122	55	26	30	21	254
	1960-61	39	14	6	9	6	74
TOTAL,	1920-61	337	139	47	85	101	709
CLAREMONT UNIV	1930-39					1	1
COLLEGE	1940-49			3	2		5
	1950-59		5	33	5	11	54
9310	1960-61		7	10	6	3	26
TOTAL,	1920-61		12	46	13	15	86
CLARK	1920-29	19	1	70	2	1	93
UNIVERSITY	1930-39	10	2	77	1		90
	1940-49	21	1	69			91
1412	1950-59	26	1	147	1		175
	1960-61	6		31			37
TOTAL,	1920-61	82	5	394	4	1	486
CLEMSON AGRI-	1960-61		1				1
CULTURAL COLL							
5708 TOTAL,	1920-61		1				1
COLORADO SCHOOL	1920-29	5					5
OF MINES	1930-39	13					13
	1940-49	7					7
8404	1950-59	49					49
	1960-61	9					9
TOTAL,	1920-61	83					83
COLORADO STATE	1930-39					21	21
COLLEGE	1940-49					59	59
	1950-59			1		210	211
8405	1960-61					119	119
TOTAL,	1920-61			1		409	410
COLORADO STATE	1950-59	8	4				12
UNIVERSITY	1960-61	5	7				12
8402 TOTAL,	1920-61	13	11				24
UNIVERSITY OF	1920-29	12	6	2	1	2	23
COLORADO	1930-39	49	32	9	2	8	100
	1940-49	50	27	21	11	56	165
8411	1950-59	170	78	103	41	182	574
	1960-61	56	15	28	7	39	145
TOTAL,	1920-61	337	158	163	62	287	1007

Appendix 2

DOCTORATE PRODUCTION BY INSTITUTION IN FIVE FIELDS, BY DECADE

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
COLUMBIA UNIVERSITY 2116	1920-29	269	102	366	159	350	1246
	1930-39	384	146	473	359	730	2092
	1940-49	403	167	457	387	1045	2459
	1950-59	785	257	1022	952	2597	5613
	1960-61	163	50	281	194	441	1129
	TOTAL, 1920-61	2004	722	2599	2051	5163	12539
UNIVERSITY OF CONNECTICUT 1615	1940-49	2	1				3
	1950-59	65	48	49	1	73	236
	1960-61	21	7	22	1	36	87
	TOTAL, 1920-61	88	56	71	2	109	326
CORNELL UNIVERSITY 2120	1920-29	204	227	110	110	17	668
	1930-39	321	488	181	219	63	1272
	1940-49	326	566	176	123	58	1249
	1950-59	576	806	401	205	171	2159
	1960-61	137	168	84	58	40	487
	TOTAL, 1920-61	1564	2255	952	715	349	5835
UNIVERSITY OF DELAWARE 5103	1940-49	17					17
	1950-59	190	2				192
	1960-61	32	7				39
	TOTAL, 1920-61	239	9				248
UNIVERSITY OF DENVER 8410	1940-49				6	17	23
	1950-59			135	129	137	401
	1960-61			25	34	28	87
	TOTAL, 1920-61			160	169	182	511
DOWNSTATE MEDICAL CENTER 2137	1960-61		8				8
	TOTAL, 1920-61		8				8
DREW UNIVERSITY 2230	1920-29				1		1
	1930-39				22		22
	1940-49				33		33
	1950-59			3	43		46
	1960-61				6		6
	TOTAL, 1920-61			3	105		108
DROPSIE COLLEGE 2315	1920-29			2	21		23
	1930-39			5	18		23
	1940-49			5	15	1	21
	1950-59			14	24	14	52
	1960-61			1	7	2	10
	TOTAL, 1920-61			27	85	17	129
DUKE UNIVERSITY 5612	1920-29	4	2	1			7
	1930-39	51	43	81	35	7	217
	1940-49	78	68	71	51	11	279
	1950-59	179	154	191	117	27	668
	1960-61	34	34	40	34	18	160
	TOTAL, 1920-61	346	301	384	237	63	1331

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
DUQUESNE UNIVERSITY 2316	1930-39				2		2
	1950-59	8	2		1		11
	1960-61	3	3				6
	TOTAL, 1920-61	11	5		3		19
EMORY UNIVERSITY 5815	1940-49	3	1				4
	1950-59	37	34	24	15		110
	1960-61	5	8	12	14		39
	TOTAL, 1920-61	45	43	36	29		153
FLETCHER SCHOOL OF LAW & DIPLO 1480	1950-59			33	2		35
	1960-61			13			13
	TOTAL, 1920-61			46	2		48
FLORIDA STATE UNIVERSITY 5907	1950-59	52	28	60	49	56	245
	1960-61	11	18	21	27	47	124
	TOTAL, 1920-61	63	46	81	76	103	369
UNIVERSITY OF FLORIDA 5912	1930-39	14	14				28
	1940-49	12	22	1	1	5	41
	1950-59	169	130	97	69	122	587
	1960-61	65	48	35	20	32	200
	TOTAL, 1920-61	260	214	133	90	159	856
FORDHAM UNIVERSITY 2123	1920-29	18	1	42	130	49	240
	1930-39	22	19	63	62	57	223
	1940-49	23	44	84	51	26	228
	1950-59	85	71	180	133	86	555
	1960-61	14	15	39	32	19	119
	TOTAL, 1920-61	162	150	408	408	237	1365
COL OF FORESTRY AT SYRACUSE 2046	1950-59	23	28				51
	1960-61	12	5				17
	TOTAL, 1920-61	35	33				68
GEORGE PEABODY COLL FOR TEACH 6210	1920-29	2	3	18	16	40	79
	1930-39	8	1	37	22	133	201
	1940-49	5		11	8	129	153
	1950-59	14		39	21	210	284
	1960-61	1		10	5	61	77
	TOTAL, 1920-61	30	4	115	72	573	794
GEORGE WASH UNIVERSITY 5307	1920-29	28	23	20	2	6	79
	1930-39	12	29	18	2	15	76
	1940-49	8	17	12	11	38	86
	1950-59	24	114	43	27	38	246
	1960-61	4	16	6	6	4	36
	TOTAL, 1920-61	76	199	99	48	101	523

Appendix 2

DOCTORATE PRODUCTION BY INSTITUTION IN FIVE FIELDS, BY DECADE

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
GEORGETOWN	1920-29	1	2	8	7	1	19
UNIVERSITY	1930-39	6	10	23	14		53
	1940-49	19	20	38	4		81
5308	1950-59	100	61	136	24		321
	1960-61	7	13	35	4		59
	TOTAL, 1920-61	133	106	240	53	1	533
GEORGIA INSTIT	1950-59	66					66
OF TECHNOLOGY	1960-61	32					32
5820	TOTAL, 1920-61	98					98
UNIVERSITY OF	1940-49			1		4	5
GEORGIA	1950-59	12	13	2	2	31	60
	1960-61	2	6	3	2	12	25
5841	TOTAL, 1920-61	14	19	6	4	47	90
HAHNEMANN MED	1940-49	1	2				3
COL & HOSPITAL	1950-59		7				7
	1960-61		5				5
2323	TOTAL, 1920-61	1	14				15
HARVARD	1920-29	143	86	178	339	83	829
UNIVERSITY	1930-39	298	167	442	496	48	1451
	1940-49	381	145	499	357	83	1465
1422	1950-59	771	264	1125	736	285	3181
	1960-61	176	50	229	186	71	712
	TOTAL, 1920-61	1769	712	2473	2114	570	7638
UNIVERSITY OF	1930-39	1	1				2
HAWAII	1950-59	5	10				15
	1960-61	2	7	1			10
9501	TOTAL, 1920-61	8	18	1			27
HEBREW UNION	1960-61				1		1
COLL CALIF							
9300	TOTAL, 1920-61				1		1
HEBREW UNION	1950-59				1		1
COLLEGE N Y							
2033	TOTAL, 1920-61				1		1
HEBREW UNION	1930-39			1	5		6
COLLEGE OHIO	1940-49			2	6		8
*	1950-59			1	17		18
3126	1960-61			4	5		9
	TOTAL, 1920-61			8	33		41

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
UNIVERSITY OF	1940-49					2	2
HOUSTON	1950-59			60		72	132
	1960-61			18		13	31
7459	TOTAL, 1920-61			78		87	165
HOWARD	1950-59	5					5
UNIVERSITY	1960-61	1					1
5309	TOTAL, 1920-61	6					6
ILLINOIS INSTIT	1930-39	1					1
OF TECHNOLOGY	1940-49	29					29
	1950-59	223	9	26	3		261
3341	1960-61	50	5	7			62
	TOTAL, 1920-61	303	14	33	3		353
UNIVERSITY OF	1920-29	199	106	74	37	15	431
ILLINOIS	1930-39	424	173	194	128	17	936
	1940-49	633	219	113	124	33	1122
3388	1950-59	1302	664	430	351	248	2995
	1960-61	362	171	122	92	76	823
	TOTAL, 1920-61	2920	1333	933	732	389	6307
INDIANA	1920-29	29	13	22	9	12	85
UNIVERSITY	1930-39	91	19	28	12	28	178
	1940-49	95	33	52	15	85	280
3220	1950-59	203	132	303	263	617	1518
	1960-61	50	22	89	99	177	437
	TOTAL, 1920-61	468	219	494	398	919	2498
STATE UNIVER-	1920-29	105	39	128	37	81	390
SITY OF IOWA	1930-39	228	106	271	150	105	860
	1940-49	178	105	207	225	72	787
4222	1950-59	282	239	364	425	259	1569
	1960-61	53	62	64	105	54	338
	TOTAL, 1920-61	846	551	1034	942	571	3944
IOWA ST UNIV	1920-29	40	73	1			114
OF SCI & TECH	1930-39	145	251	3		1	400
	1940-49	192	274	28	9	10	513
4212	1950-59	504	535	126	7	39	1211
	1960-61	147	106	26	1	2	282
	TOTAL, 1920-61	1028	1239	184	17	52	2520
JEFFERSON MED	1950-59		26				26
COL OF PHIL	1960-61		2				2
2326	TOTAL, 1920-61		28				28
JEWISH THEOL	1930-39				3		3
SEM OF AMERICA	1940-49				13		13
	1950-59				45	3	48
2132	1960-61			2	6		8
	TOTAL, 1920-61			2	67	3	72

Appendix 2

DOCTORATE PRODUCTION BY INSTITUTION IN FIVE FIELDS, BY DECADE

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
JOHNS HOPKINS	1920-29	236	231	128	67	14	676
UNIVERSITY	1930-39	272	242	153	139	32	838
	1940-49	189	116	68	77	21	471
5206	1950-59	347	205	149	121	17	839
	1960-61	91	38	41	30	4	204
TOTAL,	1920-61	1135	832	539	434	88	3028
UNIVERSITY OF	1920-29	20	21	2		4	47
KANSAS	1930-39	42	35	26	5	9	117
	1940-49	32	26	12	2	23	95
4727	1950-59	184	110	108	28	118	548
	1960-61	62	20	16	11	40	149
TOTAL,	1920-61	340	212	164	46	194	956
UNIVERSITY OF	1950-59					4	4
KANSAS CITY	1960-61				1	2	3
4337 TOTAL,	1920-61				1	6	7
KANSAS ST UNIV	1930-39	4	2				6
OF AG & AP SCI	1940-49	10	13				23
	1950-59	64	132				196
4713	1960-61	16	44	1	2		63
TOTAL,	1920-61	94	191	1	2		288
UNIVERSITY OF	1930-39	10		17	1	15	43
KENTUCKY	1940-49	10		17	5	23	55
	1950-59	65	9	120	21	64	279
6126	1960-61	17	10	21	2	16	66
TOTAL,	1920-61	102	19	175	29	118	443
LAWRENCE	1930-39	32					32
COLLEGE	1940-49	66	1				67
	1950-59	70					70
3510	1960-61	18					18
TOTAL,	1920-61	186	1				187
LEHIGH UNIV	1930-39	9					9
	1940-49	46	1				47
	1950-59	150	13	3	4		170
2332	1960-61	41	3	1	3		48
TOTAL,	1920-61	246	17	4	7		274
LOMA LINDA	1950-59		1				1
UNIVERSITY	1960-61	1	1				2
9312 TOTAL,	1920-61	1	2				3
LA STATE UNIV &	1930-39	12	4	5	16	6	43
AG & MECH COL	1940-49	44	26	31	32	11	144
	1950-59	116	120	88	71	55	450
7208	1960-61	35	29	40	24	15	143
TOTAL,	1920-61	207	179	164	143	87	780

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
UNIVERSITY OF	1940-49		1				1
LOUISVILLE	1950-59	28	1				29
	1960-61	16	3				19
6125 TOTAL,	1920-61	44	5				49
LOYOLA	1920-29					3	3
UNIVERSITY	1930-39			1	1	6	8
	1940-49	3		8	9	1	21
3354	1950-59	2	38	51	12	25	128
	1960-61	2	10	12	3	20	47
TOTAL,	1920-61	7	48	72	25	55	207
UNIVERSITY OF	1960-61	3					3
MAINE 1111 TOTAL,	1920-61	3					3
MARQUETTE	1930-39	4	2	2	5	3	16
UNIVERSITY	1940-49	7	3	4	10	7	31
	1960-61		4				4
3512 TOTAL,	1920-61	11	9	6	15	10	51
UNIVERSITY OF	1920-29	11	19	2	1		33
MARYLAND	1930-39	52	78	3	1		134
	1940-49	89	101	15	4	5	214
5226	1950-59	216	273	101	31	116	737
	1960-61	62	52	26	8	35	183
TOTAL,	1920-61	430	523	147	45	156	1301
MASS COLLEGE	1950-59	3	2				5
OF PHARMACY	1960-61	1	1				2
1426 TOTAL,	1920-61	4	3				7
MASS INSTITUTE	1920-29	131	9				140
OF TECHNOLOGY	1930-39	401	15				416
	1940-49	694	27	10	10		741
1427	1950-59	1521	52	84	9		1666
	1960-61	371	11	33	1		416
TOTAL,	1920-61	3118	114	127	20		3379
UNIVERSITY OF	1920-29	1	6				7
MASSACHUSETTS	1930-39	10	19	2	1		32
	1940-49	3	52				55
1459	1950-59	21	78	14			113
	1960-61	11	6	6			23
TOTAL,	1920-61	46	161	22	1		230
MEDICAL COLL OF	1950-59	4	9				13
SOUTH CAROLINA	1960-61		6				6
5722 TOTAL,	1920-61	4	15				19

Appendix 2

DOCTORATE PRODUCTION BY INSTITUTION IN FIVE FIELDS, BY DECADE

Institution	Period	Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
MEDICAL COLLEGE	1950-59	3	10				13
OF VIRGINIA	1960-61	1	2				3
5419	TOTAL, 1920-61	4	12				16
UNIVERSITY OF	1960-61		1	1			2
MIAMI							
5911	TOTAL, 1920-61		1	1			2
MICHIGAN ST UNI	1920-29	1	14	2			17
OF AC & AP SCI	1930-39	22	53	4			79
	1940-49	31	70	7		4	112
3421	1950-59	228	447	182	34	195	1086
	1960-61	70	131	89	40	80	410
	TOTAL, 1920-61	352	715	284	74	279	1704
UNIVERSITY OF	1920-29	151	69	77	60	18	375
MICHIGAN	1930-39	411	227	142	119	56	955
	1940-49	328	223	160	144	104	959
3430	1950-59	826	478	588	443	304	2639
	1960-61	193	92	155	133	65	638
	TOTAL, 1920-61	1909	1089	1122	899	547	5566
MIDDLEBURY	1930-39				1		1
COLLEGE	1940-49				6		6
	1950-59				19		19
1306	1960-61				4		4
	TOTAL, 1920-61				30		30
UNIVERSITY OF	1920-29	83	168	68	15	25	359
MINNESOTA	1930-39	197	343	159	38	37	774
	1940-49	235	442	221	56	66	1020
4133	1950-59	496	743	589	192	181	2201
	1960-61	96	147	112	70	52	477
	TOTAL, 1920-61	1107	1843	1149	371	361	4831
MISSISSIPPI ST	1950-59		10				10
UNIVERSITY	1960-61	1	3	1			5
6412	TOTAL, 1920-61	1	13	1			15
UNIVERSITY OF	1950-59		3			30	33
MISSISSIPPI	1960-61	2	3		1	7	13
6417	TOTAL, 1920-61	2	6		1	37	46
UNIVERSITY OF	1920-29	15	20	4	3	11	53
MISSOURI	1930-39	43	63	18	14	50	188
	1940-49	57	62	30	15	99	263
4338	1950-59	172	164	77	62	264	739
	1960-61	30	51	35	12	56	184
	TOTAL, 1920-61	317	360	164	106	480	1427
MONTANA STATE	1950-59	11	3			2	16
COLLEGE	1960-61	11	3			3	17
8106	TOTAL, 1920-61	22	6			5	33
MONTANA STATE	1950-59					3	3
UNIVERSITY	1960-61					1	1
8108	TOTAL, 1920-61					4	4
UNIVERSITY OF	1920-29	18	11	3	6	5	43
NEBRASKA	1930-39	52	37	42	8	20	159
	1940-49	43	48	40	8	56	195
4618	1950-59	74	100	167	22	139	502
	1960-61	23	32	22	7	60	144
	TOTAL, 1920-61	210	228	274	51	280	1043
UNIVERSITY OF	1950-59	8	7				15
NEW HAMPSHIRE	1960-61	13	5				18
1207	TOTAL, 1920-61	21	12				33
NEW MEXICO INST	1950-59	1					1
OF MIN & TECH							
8507	TOTAL, 1920-61	1					1
NEW MEXICO ST	1960-61	5					5
UNIVERSITY							
8503	TOTAL, 1920-61	5					5
UNIVERSITY OF	1940-49			4	2		6
NEW MEXICO	1950-59	37	10	31	29		107
	1960-61	11		5	10	6	32
8508	TOTAL, 1920-61	48	10	40	41	6	145
NEW SCHOOL FOR	1930-39			2			2
SOC RESEARCH	1940-49			19	2		21
	1950-59			93	8		101
2163	1960-61			11	2		13
	TOTAL, 1920-61			125	12		137
NEW YORK LAW	1950-59				4		4
SCHOOL	1960-61				1		1
2135	TOTAL, 1920-61				5		5

Appendix 2

DOCTORATE PRODUCTION BY INSTITUTION IN FIVE FIELDS, BY DECADE

Institution	Decade	Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
NEW YORK	1920-29	48	12	41	102	60	263
UNIVERSITY	1930-39	168	57	115	241	442	1023
	1940-49	170	66	60	136	620	1054
2165	1950-59	463	167	658	355	970	2613
	1960-61	113	38	195	110	183	639
	TOTAL, 1920-61	962	342	1069	944	2275	5592
UNIVERSITY OF	1920-29	20	3	21	25	3	72
NORTH CAROLINA	1930-39	68	11	64	69	15	227
	1940-49	98	39	94	82	12	325
5640	1950-59	259	220	295	188	86	1048
	1960-61	51	79	72	50	27	279
	TOTAL, 1920-61	496	352	546	414	143	1951
NORTH CAROLINA	1950-59					3	3
COLL AT DURHAM	1960-61					1	1
5630	TOTAL, 1920-61					4	4
UNIVERSITY OF	1920-29			1		1	2
NORTH DAKOTA	1930-39	1		15	1	14	31
	1940-49			5		5	10
4410	1950-59	2	5	10	1	45	63
	1960-61		1	3		14	18
	TOTAL, 1920-61	3	6	34	2	79	124
NORTH TEXAS	1950-59	1		1	7	27	36
STATE UNIV	1960-61				5	25	30
7429	TOTAL, 1920-61	1		1	12	52	66
NORTHERN BAPT	1930-39				6		6
THEOL SEMINARY	1940-49				42		42
	1950-59				64		64
3364	1960-61				11		11
	TOTAL, 1920-61				123		123
NORTHWESTERN	1920-29	27	13	9	28	5	82
UNIVERSITY	1930-39	93	90	82	78	33	376
	1940-49	160	76	108	149	87	580
3369	1950-59	408	112	294	377	169	1360
	1960-61	102	24	63	63	26	278
	TOTAL, 1920-61	790	315	556	695	320	2676
UNIVERSITY OF	1920-29	7		5	9	1	22
NOTRE DAME	1930-39	48	1		3	2	54
	1940-49	84	5	8	11	1	109
3235	1950-59	249	34	34	36	7	360
	1960-61	57	5	10	15	3	90
	TOTAL, 1920-61	445	45	57	74	14	635
OHIO STATE	1920-29	137	81	60	15	33	326
UNIVERSITY	1930-39	328	169	195	80	121	893
	1940-49	377	240	216	85	191	1109
3142	1950-59	748	573	531	339	353	2544
	1960-61	134	114	123	99	63	533
	TOTAL, 1920-61	1724	1177	1125	618	761	5405

Institution	Decade	Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
OHIO UNIVERSITY	1950-59	1					1
	1960-61	4			6	1	11
3143	TOTAL, 1920-61	5			6	1	12
OKLAHOMA ST UNI	1940-49		3			8	11
OF AGR & AP SC	1950-59	68	81	10		8	237
	1960-61	29	33	8		30	100
7314	TOTAL, 1920-61	97	117	18		116	348
UNIVERSITY OF	1920-29		1				1
OKLAHOMA	1930-39	3	10	10		27	50
	1940-49	16	3	6	3	27	55
7325	1950-59	93	62	67	19	131	372
	1960-61	18	25	26	8	35	112
	TOTAL, 1920-61	130	101	109	30	220	590
OREGON STATE	1930-39	5	9				14
UNIVERSITY	1940-49	25	30			6	61
	1950-59	117	201	5	1	70	394
9211	1960-61	28	60	3		7	98
	TOTAL, 1920-61	175	300	8	1	83	567
UNIVERSITY OF	1920-29	1				2	3
OREGON	1930-39	2	6	1	5	14	28
	1940-49	5	10	2		30	47
9217	1950-59	57	23	49	7	152	288
	1960-61	14	10	21	5	39	89
	TOTAL, 1920-61	79	49	73	17	237	455
UNIVERSITY OF	1950-59			9	9	4	22
THE PACIFIC	1960-61			1	1	4	6
9315	TOTAL, 1920-61			10	10	8	28
PENNSYLVANIA ST	1920-29	7	2	1	2	1	13
UNIVERSITY	1930-39	116	39	5	11	30	201
	1940-49	219	85	29	14	59	406
2362	1950-59	489	184	216	63	330	1282
	1960-61	155	48	46	16	92	357
	TOTAL, 1920-61	986	358	297	106	512	2259
UNIVERSITY OF	1920-29	53	33	138	75	45	344
PENNSYLVANIA	1930-39	85	116	193	180	62	636
	1940-49	140	118	134	114	63	569
2384	1950-59	329	257	456	265	97	1404
	1960-61	117	61	110	75	20	383
	TOTAL, 1920-61	724	585	1031	709	287	3336
PHILADELPHIA CO	1930-39	2	9				11
OF PHARM & SCI	1940-49		10				10
	1950-59	4	24			1	29
2365	1960-61	2	2				4
	TOTAL, 1920-61	8	45			1	54

Appendix 2

DOCTORATE PRODUCTION BY INSTITUTION IN FIVE FIELDS, BY DECADE

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
UNIVERSITY OF PITTSBURGH 2385	1920-29	62	12	1	7	10	92
	1930-39	93	80	56	72	120	421
	1940-49	130	43	74	45	193	485
	1950-59	236	90	264	74	344	1008
	1960-61	86	33	41	34	42	236
	TOTAL, 1920-61	607	258	436	232	709	2242
POLYTECHNIC INS OF BROOKLYN 2171	1930-39	12					12
	1940-49	161					161
	1950-59	372	1				373
	1960-61	84					84
	TOTAL, 1920-61	629	1				630
UNIVERSITY OF PORTLAND 9218	1950-59			13		2	15
	1960-61			9		7	16
	TOTAL, 1920-61			22		9	31
PRINCETON UNIVERSITY 2221	1920-29	122	12	37	58		229
	1930-39	213	28	89	133		463
	1940-49	256	25	92	123		496
	1950-59	513	45	233	203		994
	1960-61	137	8	83	48		276
	TOTAL, 1920-61	1241	118	534	565		2458
PURDUE UNIVERSITY 3226	1920-29	1					1
	1930-39	80	28	3			111
	1940-49	320	89	72	5	3	489
	1950-59	872	479	359	46	26	1782
	1960-61	228	139	73	18	13	471
	TOTAL, 1920-61	1501	735	507	69	42	2854
RADCLIFFE COLLEGE 1448	1920-29	6	10	24	32	1	73
	1930-39	19	21	47	47		134
	1940-49	22	19	54	42	3	140
	1950-59	29	50	136	85	3	303
	1960-61	4	10	35	20	2	71
	TOTAL, 1920-61	80	110	296	226	9	721
RENSSELAER POLY TECHNIC INST 2174	1920-29	19					19
	1930-39	50					50
	1940-49	32					32
	1950-59	164					164
	1960-61	69					69
	TOTAL, 1920-61	334					334
UNIVERSITY OF RHODE ISLAND 1508	1960-61	6	1				7
	TOTAL, 1920-61	6	1				7
RICE UNIV 7434	1920-29	15					15
	1930-39	30	6	1			37
	1940-49	36	6				42
	1950-59	127	22	5	9		163
	1960-61	49	6	1	5		61
	TOTAL, 1920-61	257	40	7	14		318

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
UNIVERSITY OF ROCHESTER 2194	1920-29		7				7
	1930-39	33	50	6	6		95
	1940-49	91	67	15	47		220
	1950-59	226	165	95	126		612
	1960-61	38	19	19	27	1	104
	TOTAL, 1920-61	388	308	135	206	1	1038
ROCKEFELLER INSTITUTE 2028	1950-59		5				5
	1960-61		19				19
	TOTAL, 1920-61		24				24
RUTGERS THE ST UNIVERSITY 2223	1920-29	4	40				44
	1930-39	23	66			13	102
	1940-49	34	91	4		21	150
	1950-59	171	356	20	13	82	642
	1960-61	47	86	15	5	22	175
	TOTAL, 1920-61	279	639	39	18	138	1113
ST BONAVENTURE UNIVERSITY 2181	1940-49			1	6		7
	1950-59		3		7		10
	1960-61		3		1		4
	TOTAL, 1920-61		6	1	14		21
ST JOHNS UNIVERSITY 2183	1930-39				3		3
	1940-49			6	18		24
	1950-59		3	24	26	12	65
	1960-61		6	15	2	7	30
	TOTAL, 1920-61		9	45	49	19	122
ST LOUIS UNIVERSITY 4332	1920-29	2	3	2			7
	1930-39	26	18	27	33	6	110
	1940-49	27	21	22	18	7	95
	1950-59	112	71	79	62	24	348
	1960-61	20	11	22	21	16	90
	TOTAL, 1920-61	187	124	152	134	53	650
ST MARYS COLLEGE INC 3230	1940-49				13		13
	1950-59				34		34
	1960-61				9		9
	TOTAL, 1920-61				56		56
ST MARYS SEM & UNIVERSITY 5223	1930-39				4		4
	1940-49			1	5		6
	1950-59				2		2
	TOTAL, 1920-61			1	11		12
SMITH COLLEGE 1451	1920-29				2		2
	1930-39	1		1			2
	1940-49	1	3		2		6
	1950-59		2				2
	TOTAL, 1920-61	2	5	1	4		12

Appendix 2

DOCTORATE PRODUCTION BY INSTITUTION IN FIVE FIELDS, BY DECADE

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
UNIVERSITY OF	1920-29			2	3	5	10
SOUTH CAROLINA	1930-39				3	3	6
	1940-49			1			1
5727	1950-59	7	2	8	3	6	26
	1960-61	5	3	2	1	2	13
TOTAL,	1920-61	12	5	13	10	16	56
SOUTH DAKOTA ST	1950-59		2	1			3
CO OF AG & MEC	1960-61		6	2			8
4508 TOTAL,	1920-61		8	3			11
STATE UNIV OF	1950-59					3	3
SOUTH DAKOTA	1960-61		2			5	7
4511 TOTAL,	1920-61		2			8	10
UNIVERSITY OF	1920-29			3			3
SOUTHERN CALIF	1930-39	11	18	59	33	48	169
	1940-49	16	28	113	72	114	343
9358	1950-59	119	119	292	287	445	1262
	1960-61	22	24	76	74	117	313
TOTAL,	1920-61	168	189	543	466	724	2090
SOUTHERN ILL-	1950-59				1	1	2
INOIS UNIV	1960-61			7	3	5	15
3383 TOTAL,	1920-61			7	4	6	17
SPRINGFIELD	1950-59					19	19
COLLEGE	1960-61					7	7
1452 TOTAL,	1920-61					26	26
STANFORD	1920-29	65	47	63	32	33	240
UNIVERSITY	1930-39	127	65	119	61	80	452
	1940-49	174	80	99	60	274	687
9355	1950-59	580	139	293	215	561	1788
	1960-61	183	29	72	72	63	419
TOTAL,	1920-61	1129	360	646	440	1011	3586
STEVENS INSTIT	1950-59	4					4
OF TECHNOLOGY	1960-61	5					5
2226 TOTAL,	1920-61	9					9
SYRACUSE UNIV	1920-29	4	3	5	2	1	15
	1930-39	18	12	21	6	3	60
	1940-49	19	11	33	7	26	96
2187	1950-59	186	101	246	63	136	732
	1960-61	32	15	65	16	33	161
TOTAL,	1920-61	259	142	370	94	199	1064

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
TEMPLE	1920-29				9	4	13
UNIVERSITY	1930-39			1	45	52	98
	1940-49				31	54	85
2380	1950-59	64	15	38	54	135	306
	1960-61	18	4	13	16	27	78
TOTAL,	1920-61	82	19	52	155	272	580
UNIVERSITY OF	1930-39	1	2				3
TENNESSEE	1940-49	8	2		1		11
	1950-59	141	71	65	15	94	386
6240	1960-61	25	22	11	4	31	93
TOTAL,	1920-61	175	97	76	20	125	493
TEXAS TECHNOLOG	1950-59	6		9	7	34	56
ICAL COLLEGE	1960-61	1		3	1	11	16
7455 TOTAL,	1920-61	7		12	8	45	72
UNIVERSITY OF	1920-29	9	3	8	4	7	31
TEXAS	1930-39	75	39	69	36	41	260
	1940-49	132	48	103	50	103	436
7460	1950-59	464	169	339	214	231	1417
	1960-61	84	48	72	59	43	306
TOTAL,	1920-61	764	307	591	363	425	2450
TEXAS WOMANS	1950-59	9	10		12	10	41
UNIVERSITY	1960-61			1	8	4	13
7454 TOTAL,	1920-61	9	10	1	20	14	54
TUFTS	1940-49		2	8			10
UNIVERSITY	1950-59		22	27			49
	1960-61	1	4	2			7
1458							
TOTAL,	1920-61	1	28	37			66
TULANE UNIV OF	1920-29		6	1	1		8
LOUISIANNA	1930-39	1	12				13
	1940-49	4	12	2			18
7216	1950-59	75	57	44	46		222
	1960-61	12	25	16	11		64
TOTAL,	1920-61	92	112	63	58		325
UNIVERSITY OF	1950-59					13	13
TULSA	1960-61					10	10
7326 TOTAL,	1920-61					23	23
UNION COLLEGE &	1920-29	3					3
UNIVERSITY	1930-39	4					4
	1950-59		2				2
2191	1960-61		1				1
TOTAL,	1920-61	7	3				10

Appendix 2

DOCTORATE PRODUCTION BY INSTITUTION IN FIVE FIELDS, BY DECADE

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
U S NAVAL POST-GRADUATE SCH	1950-59	1					1
	1960-61	1					1
9381	TOTAL, 1920-61	2					2
UPSTATE MEDICAL CENTER	1950-59		2				2
	1960-61		1				1
2047	TOTAL, 1920-61		3				3
UTAH STATE UNIV OF AGR & AP SC	1950-59	7	26	1		8	42
	1960-61	4	16			3	23
8707	TOTAL, 1920-61	11	42	1		11	65
UNIVERSITY OF UTAH	1940-49	11	4	3	2		20
	1950-59	204	73	77	29	56	439
	1960-61	56	26	13	6	10	111
8706	TOTAL, 1920-61	271	103	93	37	66	570
VANDERBILT UNIVERSITY	1920-29		4	1	2		7
	1930-39	5	13	37	23		78
	1940-49	9	9	23	37		78
6242	1950-59	103	44	90	91		328
	1960-61	23	6	21	21		71
	TOTAL, 1920-61	140	76	172	174		562
UNIV OF VERMONT & ST AGRIC COL	1940-49		1				1
1309	TOTAL, 1920-61		1				1
VIRGINIA POLY-TECHNIC INST	1940-49	9	2				11
	1950-59	66	19				85
	1960-61	27	8	3			38
5436	TOTAL, 1920-61	102	29	3			134
UNIVERSITY OF VIRGINIA	1920-29	27	6	7	27	2	69
	1930-39	81	37	44	45	10	217
	1940-49	101	25	54	39	5	224
5433	1950-59	164	31	105	46	40	386
	1960-61	41	6	28	10	20	105
	TOTAL, 1920-61	414	105	238	167	77	1001
WASHINGTON ST UNIVERSITY	1920-29		1				1
	1930-39	6	19	1		1	27
	1940-49	9	34	7		2	52
9110	1950-59	54	155	38		48	295
	1960-61	13	31	20		24	88
	TOTAL, 1920-61	82	240	66		75	463

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
WASHINGTON UNIVERSITY MO	1920-29	2	38	4			44
	1930-39	31	53	18	11	4	117
	1940-49	33	36	20	6	10	105
4339	1950-59	200	101	117	20	53	491
	1960-61	45	8	14	11	7	85
	TOTAL, 1920-61	311	236	173	48	74	842
UNIVERSITY OF WASHINGTON	1920-29	13	8	6	19	17	63
	1930-39	65	64	29	44	33	235
	1940-49	84	49	29	37	33	232
9113	1950-59	333	146	238	130	95	942
	1960-61	101	35	57	46	8	247
	TOTAL, 1920-61	596	302	359	276	186	1719
WAYNE STATE UNIVERSITY	1940-49	8				2	10
	1950-59	109	33	6	4	145	297
	1960-61	32	10	16	15	47	120
3433	TOTAL, 1920-61	149	43	22	19	194	427
WEST VIRGINIA UNIVERSITY	1930-39	19	12	1	1	1	34
	1940-49	15	8	3			26
	1950-59	42	26	9		4	81
5517	1960-61	4	4	1		1	10
	TOTAL, 1920-61	80	50	14	1	6	151
WESTERN RESERVE UNIVERSITY	1920-29	3	1				4
	1930-39	40	33	14	30	17	134
	1940-49	57	31	23	36	17	164
3159	1950-59	92	62	162	72	55	443
	1960-61	16	10	42	14	18	100
	TOTAL, 1920-61	208	137	241	152	107	845
UNIVERSITY OF WISCONSIN	1920-29	213	223	200	82	28	746
	1930-39	377	404	253	215	55	1304
	1940-49	396	574	255	173	91	1489
3527	1950-59	882	1265	673	437	243	3500
	1960-61	196	263	134	126	73	792
	TOTAL, 1920-61	2064	2729	1515	1033	490	7831
WOMANS MED COLL OF PENNA	1960-61		1				1
2398	TOTAL, 1920-61		1				1
WOODSTOCK COLLEGE	1940-49				12		12
	1950-59				3		3
	1960-61				3		3
5230	TOTAL, 1920-61				18		18
WORCESTER POLY-TECHNIC INST	1920-29	2					2
	1960-61	1					1
1464	TOTAL, 1920-61	3					3

Appendix 2

DOCTORATE PRODUCTION BY INSTITUTION IN FIVE FIELDS, BY DECADE

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
UNIVERSITY OF WYOMING	1940-49					9	9
	1950-59	17	15	1		78	111
	1960-61	5	4	3		16	28
8301							
	TOTAL, 1920-61	22	19	4		103	148
YALE UNIVERSITY	1920-29	169	140	67	196	35	607
	1930-39	273	195	216	390	124	1198
	1940-49	284	144	193	332	91	1044
1618	1950-59	576	240	404	637	109	1966
	1960-61	120	51	100	185		456
	TOTAL, 1920-61	1422	770	980	1740	359	5271
YESHIVA UNIVERSITY	1920-29				1		1
	1940-49			3	16		19
	1950-59			39	15	11	65
2199	1960-61			19	8	14	41
	TOTAL, 1920-61			61	40	25	126
GRAND TOTAL ALL INSTITUTIONS	1920-29	3485	2369	2573	2316	1146	11889
	1930-39	7512	5088	5041	4841	3093	25575
	1940-49	9621	5880	5495	4821	4731	30548
	1950-59	25176	14908	17581	11148	13969	82782
	1960-61	6410	3578	4357	3038	3418	20801
UNKN DEFUNCT NON-ACCREDT		5	6	5	30	6	52
	TOTAL, 1920-61	52209	31829	35052	26194	26363	171647

Appendix 3

DOCTORATE PRODUCTION BY INSTITUTION, 1920-1961 COMBINED: PHYSICAL AND BIOLOGICAL SCIENCES

	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat., Cytol., Embryol.	Physiology and Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology and Entomology	Biosciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
ADELPHI COLLEGE 2101	1					1											1
AGRIC & MECH CO OF TEXAS 7401	1	17	33	22	42	115	78	2		33	30	10		36	26	215	330
UNIVERSITY OF AKRON 3155			19			19											19
UNIVERSITY OF ALABAMA 6325		12	21			33			2	6	8	5	1	9		31	64
UNIVERSITY OF ALASKA 9400		2		6		8											8
ALFRED UNIVERSITY 2102		1	1		4	6											6
AMERICAN UNIVERSITY 5301	7	3	16		4	30	2			2	3		1	1	1	10	40
ARIZONA STATE UNIVERSITY 8603																	
UNIVERSITY OF ARIZONA 8604			13	46	4	63	8				10	12	1	5	2	38	101
UNIVERSITY OF ARKANSAS 7120			27			27				2	4					6	33
AUBURN UNIVERSITY 6302	16		4			20	6			5				8	1	20	40
BAYLOR UNIVERSITY 7406			12			12		1	4	3	13		3	1		25	37
BOSTON COLLEGE 1408			1			1									2	2	3
BOSTON UNIVERSITY 1409	12	34	53	13		112		9	2	36	26		16	9	5	103	215
BRANDEIS UNIVERSITY 1465		6	3			9					1		2		1	4	13
BRIGHAM YOUNG UNIVERSITY 8701			1			1					2					2	3
BROWN UNIVERSITY 1501	158	109	194	1	9	471			3	34	7	4	16	27	32	123	594
BRYN MAWR COLLEGE 2305	17	7	26	16	1	67			1	7	1	3	1	4	3	20	87
UNIVERSITY OF BUFFALO 2193	11	18	72			101		2	4	17	7		4		2	36	137
CALIF INST OF TECHNOLOGY 9305	83	368	316	112	381	1260	1		2	17	52	13	11	5	48	149	1409
UNIV OF CALIFORNIA BERK 9356	233	717	776	162	288	2176	95	28	17	228	240	244	93	457	173	1575	3751
UNIV OF CALIFORNIA DAVIS 9366			35		1	36	18	6		90	7	44	18	26	60	269	305
UNIV OF CALIFORNIA L A 9365	84	128	210	115	73	610	39	4	9	16	30	48	57	119	6	328	938
UNIV OF CALIFORNIA SAN F 9367			3			3			1	3	3					7	10
CARNEGIE INST OF TECHNOL 2307	48	128	150		285	611											611
CASE INST OF TECHNOLOGY 3109	23	57	89		95	264											264
CATHOLIC UNIV OF AMERICA 5302	51	102	115	3	8	279	1		3	8	15	23	13	40	17	120	399
UNIVERSITY OF CHICAGO 3387	333	458	741	263	1	1796		36	68	289	120	271	99	213	56	1152	2948
UNIVERSITY OF CINCINNATI 3156	39	62	166	17	53	337		37	3	13	40	11	16	15	4	139	476
CLAREMONT UNIV COLLEGE 9310												10			2	12	12
CLARK UNIVERSITY 1412		4	74	4		82	1			1	1	1			1	5	87
CLEMSON AGRICULTURAL COL 5708												1				1	1
COLORADO SCHOOL OF MINES 8404			2	47	34	83											83
COLORADO STATE COLLEGE 8405																	

Appendix 3

DOCTORATE PRODUCTION BY INSTITUTION, 1920-1961 COMBINED: SOCIAL SCIENCES, ARTS, AND PROFESSIONS

Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, Misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professional	Business Administration	Religion-Theology	Professional, Misc.	TOTAL ARTS-PROFESSIONAL	Education	TOTAL SOC. SCI.-ARTS-EDUC.	TOTAL ALL FIELDS
63							63										63	64
			16				16										16	346
																		19
2			3	11	6		22	2				27			29	40	91	155
																		8
																		6
27		16	76	44	149	3	315			11	7	5	1	25	49	22	386	426
																24	24	24
8	20						28									30	58	159
			9	1			10	13				2			15	77	102	135
																46	46	86
2							2									14	16	53
1			5	19	1		26	25	11	1			3		40	23	89	92
133	2	16	14	53	9	3	230	88	19	107	42		282		538	354	1122	1337
10				2		5	17	4	4	1	3				12		29	42
																2	2	5
55	1	4	20	37	13		130	66	43	31	5		15		160	4	294	888
19	18	13	5	33	9	11	108	31	82	22	9				144	2	254	341
52		3	2	2			59	4		8		4			16	178	253	390
																		1409
270	91	44	370	417	163	51	1406	189	242	74	29	3	1	14	552	564	2522	6273
																		305
218	22	12	25	114	54	23	468	53	45	26	19	9			152	297	917	1855
																		10
17			5				22					7			7		29	640
																		264
133	10	119	65	148	14	13	502	96	216	187	10		586	23	1118	231	1851	2250
575	133	419	300	391	361	146	2325	331	384	119	125	118	433	141	1651	468	4444	7392
27	4		7		8	1	47	33	39	11	2				85	101	233	709
28		1	4	7	6		46	6	3		3	1			13	15	74	86
108		4	37	62	15	168	394	1			3				4	1	399	486
																		1
																		83
1							1									409	410	410

Appendix 3

DOCTORATE PRODUCTION BY INSTITUTION, 1920-1961 COMBINED: PHYSICAL AND BIOLOGICAL SCIENCES

	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat., Cytol., Embryol.	Physiology and Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology and Entomology	Biosciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
COLORADO STATE UNIV 8402		2			11	13	3				3		3	1	1	11	24
UNIVERSITY OF COLORADO 8411	23	46	209	36	23	337		22	8	27	30	9	27	26	9	158	495
COLUMBIA UNIVERSITY 2116	144	335	913	269	343	2004		67	31	85	144	132	60	170	33	722	2726
UNIV OF CONNECTICUT 1615		17	71			88	1	13	1	15	2		8	10	6	56	144
CORNELL UNIVERSITY 2120	134	363	625	95	347	1564	688	36	56	256	145	293	137	492	152	2255	3819
UNIVERSITY OF DELAWARE 5103			174		65	239					3	1	2	2	1	9	248
UNIVERSITY OF DENVER 8410																	
DOWNSTATE MEDICAL CENTER 2137									1	5	2					8	8
DREW UNIVERSITY 2230																	
DROPSIE COLLEGE 2315																	
DUKE UNIVERSITY 5612	53	116	177			346	58	1	9	20	41	69	21	72	10	301	647
DUQUESNE UNIVERSITY 2316			11			11					5					5	16
EMORY UNIVERSITY 5815			45			45			6	6	9	1	3	5	13	43	88
FLETCHER SCH OF LAW & DI 1480																	
FLORIDA STATE UNIVERSITY 5907		5	52	6		63				10	10	8		10	8	46	109
UNIVERSITY OF FLORIDA 5912	41	18	161	1	39	260	58	32		48	13	11	1	41	10	214	474
FORDHAM UNIVERSITY 2123	2	24	132	4		162			2	36	29	23	1	37	22	150	312
CO OF FORESTRY AT SYRAC 2046			31		4	35	22					2	2	6	1	33	68
GEORGE PEABODY CO FOR TE 6210	25		4	1		30	2								2	4	34
GEORGE WASHINGTON UNIV 5307	20	11	26	16	3	76	1	4	7	53	44	15	39	32	4	199	275
GEORGETOWN UNIVERSITY 5308		13	119		1	133		5	3	27	59		9	2	1	106	239
GEORGIA INST OF TECHNOLO 5820		10	33		55	98											98
UNIVERSITY OF GEORGIA 5841	14					14	2					1	4	7	5	19	33
HAHNEMANN MED COLL & HOS 2323			1			1				7	3		4			14	15
HARVARD UNIVERSITY 1422	246	506	590	243	184	1769	4	71	5	92	72	124	18	145	181	712	2481
UNIVERSITY OF HAWAII 9501			8			8	1					2		11	4	18	26
HEB UNION COLLEGE CALIF 9300																	
HEBREW UNION COLLEGE N Y 2033																	
HEBREW UNION COLLEGE CH 3126																	
UNIVERSITY OF HOUSTON 7459																	
HOWARD UNIVERSITY 5309			6			6											6
ILLINOIS INST OF TECHNOL 3341	18	54	83		148	303				1	6		6	1		14	317
UNIVERSITY OF ILLINOIS 3388	260	313	1564	134	649	2920	343	25	21	196	131	142	147	285	43	1333	4253
INDIANA UNIVERSITY 3220	50	127	247	44		468		3	5	10	36	53	24	77	11	219	687
STATE UNIVERSITY OF IOWA 4222	65	107	458	86	130	846	3	33	20	127	91	91	30	153	3	551	1397

Appendix 3

DOCTORATE PRODUCTION BY INSTITUTION, 1920-1961 COMBINED: SOCIAL SCIENCES, ARTS, AND PROFESSIONS

Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, Misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professional	Business Administration	Religion-Theology	Professional, Misc.	TOTAL ARTS-PROFESSIONAL	Education	TOTAL SOC. SCI.-ARTS-EDUC.	TOTAL ALL FIELDS
																		24
54		8	36	54	11		163	35	22	3	2				62	287	512	1007
632	177	247	518	694	242	89	2599	529	669	312	100	119	141	181	2051	5163	9813	12539
64		3	4				71					1		1	2	109	182	326
219	39	146	312	158	67	11	952	240	137	78	154	52		54	715	349	2016	5835
																		248
158		2					160	46			121			2	169	182	511	511
																		8
		3					3	1		5			99		105		108	108
	1		2	23		1	27		33	4	8		40		85	17	129	129
105		36	64	115	64		384	96	23	27			89	2	237	63	684	1331
										1	1		1		3		3	19
8		4		18	5	1	36	12		8	4	1	4		29		65	153
			6	1	39		46							2	2		48	48
59		14		1	2	5	81	15	7		38			16	76	103	260	369
53		6	28	27	11	8	133	57			27	5	1		90	159	382	856
159		38	35	121	55		408	73	93	192	48		1	1	408	237	1053	1365
																		68
70		4	7	29	1	4	115	43	13		14		1	1	72	573	760	794
40		1	26	17	13	2	99	11	7	3	1	8		18	48	101	248	523
		4	27	112	97		240	5	1	25	4			18	53	1	294	533
																		98
2				4			6	4							4	47	57	90
																		15
248	154	153	728	725	440	25	2473	425	357	287	482	209	100	254	2114	570	5157	7638
1							1										1	27
													1		1		1	1
													1		1		1	1
		1		6	1		8		5	1	1		26		33		41	41
78							78									87	165	165
																		6
32			1				33				1	2			3		36	353
204		34	344	205	120	26	933	222	240	23	98	104		45	732	389	2054	6307
168	20	26	96	116	56	12	494	94	54	16	118	115		1	398	919	1811	2498
537	2	62	129	160	124	20	1034	244	113	34	408	99	21	23	942	571	2547	3944

Appendix 3

DOCTORATE PRODUCTION BY INSTITUTION, 1920-1961 COMBINED: PHYSICAL AND BIOLOGICAL SCIENCES

	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat., Cytol., Embryol.	Physiology and Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology and Entomology	Biosciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
IOWA ST UNIV OF SCI & TE 4212	87	119	581	12	229	1028	379	8	8	131	104	157	169	180	103	1239	2267
JEFFERSON MED COLL OF PH 2326								2	1	18	2		5			28	28
JEWISH THEOL SEM OF AMER 2132																	
JOHNS HOPKINS UNIVERSITY 5206	57	251	453	131	243	1135	3	281	1	54	87	25	122	166	93	832	1967
UNIVERSITY OF KANSAS 4727	27	44	223	33	13	340	1		22	18	15	17	40	97	2	212	552
UNIV OF KANSAS CITY 4337																	
KANS ST UNIV OF AG & AP 4713		8	85		1	94	30	2		20	8	14	41	64	12	191	285
UNIVERSITY OF KENTUCKY 6126	32	14	51		5	102	8						10		1	19	121
LAWRENCE COLLEGE 3510		14	154		18	186					1					1	187
LEHIGH UNIVERSITY 2332	12	42	80	8	104	246		1					16			17	263
LOMA LINDA UNIVERSITY 9312			1			1			1		1					2	3
LA ST UNIV & AG & MECH C 7208	13	32	94	43	25	207	46		3	9	13	70	8	29	1	179	386
UNIVERSITY OF LOUISVILLE 6125			39		5	44		1		1	3					5	49
LOYOLA UNIVERSITY ILL 3354			7			7			6	19	16		7			48	55
UNIVERSITY OF MAINE 1111			3			3											3
MARQUETTE UNIVERSITY 3512	2	1	8			11			3	2		4				9	20
UNIVERSITY OF MARYLAND 5226	36	80	263	2	49	430	171	15	12	71	18	68	80	84	4	523	953
MASS COLLEGE OF PHARMACY 1426			4			4				3						3	7
MASS INST OF TECHNOLOGY 1427	170	563	888	208	1289	3118		6		23	36	3	14	11	21	114	3232
UNIV OF MASSACHSETTS 1459			46			46	26			24	60		13	38		161	207
MEDICAL C OF SO CAROLINA 5722			4			4			4	10	1					15	19
MEDICAL COL OF VIRGINIA 5419			4			4		1	1	9					1	12	16
UNIVERSITY OF MIAMI 5911										1						1	1
MICH ST UN OF AG & AP SC 3421	26	39	183	6	98	352	373	7	3	46	32	66	128	49	11	715	1067
UNIVERSITY OF MICHIGAN 3430	227	367	525	128	662	1909	103	60	55	96	87	193	118	353	24	1089	2998
MIDDLEBURY COLLEGE 1306																	
UNIVERSITY OF MINNESOTA 4133	92	124	532	104	255	1107	332	248	69	154	305	264	102	193	176	1843	2950
MISSISSIPPI ST UNIV 6412					1	1	12				1					13	14
UNIV OF MISSISSIPPI 6417			2			2		1	1	3			1			6	8
UNIVERSITY OF MISSOURI 4338	37	54	147	26	53	317	181		4	33	29	45	6	44	18	360	677
MONTANA STATE COLLEGE 8106			11		11	22					1		1	4		6	28
MONTANA STATE UNIVERSITY 8108																	
UNIVERSITY OF NEBRASKA 4618	13	15	170	12		210	74	4	5	13	8	74	7	36	7	228	438
UNIV OF NEW HAMPSHIRE 1207			21			21	2				1	6	1	2		12	33

Appendix 3

DOCTORATE PRODUCTION BY INSTITUTION, 1920-1961 COMBINED: SOCIAL SCIENCES, ARTS, AND PROFESSIONS

Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, Misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professional	Business Administration	Religion-Theology	Professional, Misc.	TOTAL ARTS-PROFESSIONAL	Education	TOTAL SOC. SCI.-ARTS-EDUC.	TOTAL ALL FIELDS
		20	164				184					2		15	17	52	253	2520
																		28
				2			2				1		66		67	3	72	72
123	68	1	97	116	117	17	539	136	244	33	11		6	4	434	88	1061	3028
113		8	16	18	7	2	164	27	17		2				46	194	404	956
											1				1	6	7	7
			1				1							2	2		3	288
94		13	23	31	14		175	19	8		1		1		29	118	322	443
																		187
1				3			4	6			1				7		11	274
																		3
43		45	31	25		20	164	45	2		68	27		1	143	87	394	780
																		49
52			1	19			72	12	5	6			2		25	55	152	207
																		3
		2		4			6	4	5	5			1		15	10	31	51
68		11	14	19	17	18	147	25	17			3			45	156	348	1301
																		7
19			105		2	1	127				3	17			20		147	3379
16		1	5				22				1				1		23	230
																		19
																		16
1							1										1	2
129	1	62	70	7	8	7	284	30		5	18	17	1	3	74	279	637	1704
456	35	88	137	210	108	88	1122	266	195	73	227	66	1	71	899	547	2568	5566
									30						30		30	30
503	2	99	230	172	111	32	1149	146	76	21	90	20		18	371	361	1881	4831
				1			1										1	15
								1							1	37	38	46
38		31	25	55	12	3	164	36	15		19	5		31	106	480	750	1427
																5	5	33
																4	4	4
121	2	21	28	58	12	32	274	16	6	20		9			51	280	605	1043
																		33

Appendix 3

DOCTORATE PRODUCTION BY INSTITUTION, 1920-1961 COMBINED: PHYSICAL AND BIOLOGICAL SCIENCES

	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat., Cytol., Embryol.	Physiology and Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology and Entomology	Biosciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
N MEX INST OF MIN & TECH 8507				1		1											1
NEW MEXICO STATE UNIV 8503	2	3				5											5
UNIVERSITY OF NEW MEXICO 8508		9	37		2	48				6			1	2	1	10	58
NEW SCHOOL FOR SOC RESEA 2163																	
NEW YCRK LAW SCHOOL 2135																	
NEW YCRK UNIVERSITY 2165	191	206	413	49	103	962	2	12	31	76	38	2	24	94	63	342	1304
N C CCLLEGE AT CURHAM 5630																	
UNIV OF NORTH CAROLINA 5640	126	67	242	25	36	496	108	35		29	20	83	9	41	27	352	848
UNIV CF NORTH DAKOTA 4410			1		2	3			1	1	4					6	9
N TEXAS STATE UNIVERSITY 7429		1				1											1
NCRTHERN BAPT THEOL SEM 3364																	
NCRTHWESTERN UNIV 3369	29	84	450	40	187	790		38	28	92	43	16	28	60	10	315	1105
UNIVERSITY OF NCTRE DAME 3235	34	81	299		31	445			2	7		6	3	25	2	45	490
OHIO STATE UNIVERSITY 3142	87	260	954	55	368	1724	303	40	15	98	83	164	118	337	19	1177	2901
OHIC UNIVERSITY 3143			5			5											5
OKLA ST U OF AGRIC & AP 7314	19		45		33	97	38			22	5	7		38	7	117	214
UNIVERSITY CF OKLAHOMA 7325	14	39	44	21	12	130	1	5	4	14	18	9	10	38	2	101	231
OREGON STATE UNIVERSITY 9211	18	23	118		16	175	75			30	36	60	17	57	25	300	475
UNIVERSITY CF OREGON 9217	30	12	35	2		79			4	14	21	1	4		5	49	128
UNIV CF THE PACIFIC 9315																	
PENNA STATE UNIV THE 2362	6	136	529	96	219	986	159			19	79	36	51	7	7	358	1344
UNIV CF PENNSYLVANIA 2384	92	156	359	3	114	724	2	134	14	78	44	63	135	104	11	585	1309
PHIL COLL OF PHAR & SCIE 2365			8			8		10		9		5	18	2	1	45	53
UNIVERSITY OF PITTSBURGH 2385	92	96	315	5	99	607		26	2	10	40	32	26	87	35	258	865
PCLYTEC INST OF BROOKLYN 2171		26	386		217	629									1	1	630
UNIVERSITY OF PORTLANC 9218																	
PRINCETON UNIVERSITY 2221	252	278	405	191	115	1241				43	4	4	3	34	30	118	1359
PURCUE UNIVERSITY 3226	81	129	789		502	1501	187	81	1	131	93	65	67	54	56	735	2236
RADCLIFFE COLLEGE 1448	20	28	24	6	2	80	1	11	1	25	9	18	5	22	18	110	190
RENSSELAER POLYTECH INST 2174	9	37	135	2	151	334											334
UNIV CF RHODE ISLAND 1508			6			6		1								1	7
RICE UNIVERSITY 7434	48	114	73	12	10	257			1	9	3		8	14	5	40	297
UNIVERSITY OF ROCHESTER 2194	13	141	224	5	5	388		4	13	108	94	8	17	19	45	308	696
RCCKEFELLER INST THE 2028								1		3	8	1	5	1	5	24	24

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DOCTORATE PRODUCTION BY INSTITUTION, 1920-1961 COMBINED: SOCIAL SCIENCES, ARTS, AND PROFESSIONS

Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, Misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professional	Business Administration	Religion-Theology	Professional, Misc.	TOTAL ARTS-PROFESSIONAL	Education	TOTAL SOC. SCI.-ARTS-EDUC.	TOTAL ALL FIELDS
																		1
																		5
	12			28			40	22	17		2				41	6	87	145
35		34	35		21		125			12					12		137	137
														5	5		5	5
584	14	85	117	90	130	49	1069	190	144	37	146	200	23	204	944	2275	4288	5592
																4	4	4
85	4	125	130	151	40	11	546	183	175	8	40	8			414	143	1103	1951
25		3		3	2	1	34	1				1			2	79	115	124
1							1				12				12	52	65	66
													123		123		123	123
184	35	42	84	90	63	58	556	161	74	26	325	57	47	5	695	320	1571	2676
1		10	6	17	23	-	57	28	2	43		1			74	14	145	635
545	15	134	207	132	54	38	1125	141	109	27	184	128		29	618	761	2504	5405
											6				6	1	7	12
6			12				18									116	134	348
53			10	45	1		109	23			7				30	220	359	590
		1	7				8							1	1	83	92	567
19	5	9	17	16	7		73	8	8		1				17	237	327	455
3				3		4	10		3	5	2				10	8	28	28
210		35	29	8	8	7	297	42	11		28			25	106	512	915	2259
174	54	104	281	269	114	35	1031	327	220	66	80	7	6	3	709	287	2027	3336
																1	1	54
195		65	92	63	18	3	436	81	92	14	24	13	8		232	709	1377	2242
																		630
22							22									9	31	31
107	11	10	130	103	160	13	534	204	241	65	46		6	3	565		1099	2458
387		11	109				507				54	2		13	69	42	618	2854
54	19	25	68	84	45	1	296	53	55	29	80	4	1	4	226	9	531	721
																		334
																		7
				6	1		7	8	6						14		21	318
104	1	1		29			135	9	2		195				206	1	342	1038
																		24

Appendix 3

DOCTORATE PRODUCTION BY INSTITUTION, 1920-1961 COMBINED: PHYSICAL AND BIOLOGICAL SCIENCES

	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat., Cytol., Embryol.	Physiology and Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology and Entomology	Biosciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
RUTGERS THE STATE UNIV 2223	7	37	177	11	47	279	216	13		62	67	49	105	121	6	639	918
ST BONAVENTURE UNIV 2181							1			1			2	1	1	6	6
ST JOHNS UNIVERSITY N Y 2183										1			7	1		9	9
ST LOUIS UNIVERSITY 4332	33	52	73	29		187			19	14	49	5	12	8	17	124	311
ST MARYS COLLEGE INC 3230																	
ST MARYS SEMINARY & UNIV 5223																	
SMITH COLLEGE 1451		1	1			2						2			3	5	7
UNIV OF SOUTH CAROLINA 5727			12			12	2							1	2	5	17
S D ST CO OF AG & MECH A 4508							6					2				8	8
STATE UNIV OF S DAKOTA 4511											1		1			2	2
UNIV OF SOUTHERN CALIF 9358	16	31	94	16	11	168			3	35	73	5	39	32	2	189	357
SOUTHERN ILLINOIS UNIV 3383																	
SPRINGFIELD COLLEGE 1452																	
STANFORD UNIVERSITY 9355	96	142	319	156	416	1129	3	4	16	48	29	54	51	117	38	360	1489
STEVENS INST OF TECHNOL 2226		2	3		4	9											9
SYRACUSE UNIVERSITY 2187	33	62	99	16	49	259	33			6	14	22	29	35	3	142	401
TEMPLE UNIVERSITY 2380		28	54			82		8		4	5		2			19	101
UNIVERSITY OF TENNESSEE 6240	17	43	91	2	22	175		1	1	27	14	7	21	20	6	97	272
TEXAS TECHNOLOGICAL COLL 7455			6	1		7											7
UNIVERSITY OF TEXAS 7460	78	135	37[illegible]	40	140	764		6	6	24	42	41	60	105	23	307	1071
TEXAS WOMANS UNIVERSITY 7454			1		8	9				10						10	19
TUFTS UNIVERSITY 1458		1				1		3		17	8					28	29
TULANE UNIV OF LOUISIANA 7216	30		62			92		17	11	22	12	1	25	24		112	204
UNIVERSITY OF TULSA 7326																	
UNION COLL & UNIVERSITY 2191					7	7				1	1		1			3	10
U S NAVAL POSTGRADUATE S 9381					2	2											2
UPSTATE MEDICAL CENTER 2047										1	2					3	3
UTAH ST UNIV OF AGR & AP 8707				1	10	11	26			4	2	2		4	4	42	53
UNIVERSITY OF UTAH 8706	6	40	101	38	86	271		6	8	16	23	5	18	20	7	103	374
VANDERBILT UNIVERSITY 6242	6	39	95			140			11	14	17	11	9	9	5	76	216
UNIV OF VERMONT & ST AGR 1309											1					1	1
VIRGINIA POLYTECH INST 5436	29	1	23	6	43	102	8			1	7	1	3	6	3	29	131
UNIVERSITY OF VIRGINIA 5433	39	166	205	1	3	414	1		1	5	1	31	2	39	25	105	519

Appendix 3

DOCTORATE PRODUCTION BY INSTITUTION, 1920-1961 COMBINED: SOCIAL SCIENCES, ARTS, AND PROFESSIONS

Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, Misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professional	Business Administration	Religion-Theology	Professional, Misc.	TOTAL ARTS-PROFESSIONAL	Education	TOTAL SOC. SCI.-ARTS-EDUC.	TOTAL ALL FIELDS
14			9	4	12		39	15						3	18	138	195	1113
		1					1			14					14		15	21
9		6		30			45	47	1					1	49	19	113	122
3		23	45	66	15		152	33	31	56		13	1		134	53	339	650
													56		56		56	56
				1			1		1				10		11		12	12
1							1	1	2	1					4		5	12
1				12			13	10							10	16	39	56
			3				3										3	11
																8	8	10
183	9	92	66	101	87	5	543	56	61	36	199	6	107	1	466	724	1733	2090
6					1		7				4				4	6	17	17
																26	26	26
209	6	39	105	192	88	7	646	165	113	11	94	49		8	440	1011	2097	3586
																		9
115	6	17	54	26	95	57	370	40	16	12	19	3	1	3	94	199	663	1064
51					1		52	3					152		155	272	479	580
71					1	4	76	19			1				20	125	221	493
3				9			12	8							8	45	65	72
208		21	102	207	51	2	591	163	75	12	13	98	1	1	363	425	1379	2450
1							1				3			17	20	14	35	54
2			1		34		37										37	66
33		5	3	19	3		63	21	32	4	1				58		121	325
																23	23	23
																		10
																		2
																		3
		1					1									11	12	65
61	1	7		6	16	2	93	7	5		25				37	66	196	570
49		23	23	76	1		172	114	9	5			46		174		346	562
																		1
			3				3										3	134
33		13	104	68	20		238	90	39	34	2			2	167	77	482	1001

Appendix 3

DOCTORATE PRODUCTION BY INSTITUTION, 1920-1961 COMBINED: PHYSICAL AND BIOLOGICAL SCIENCES

	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat., Cytol., Embryol.	Physiology and Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology and Entomology	Biosciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
WASHINGTON STATE UNIV 9110	1	12	63	6		82	107	4		10	2	62	21	29	5	240	322
WASHINGTON UNIVERSITY MO 4339	18	112	99	16	66	311		5	33	24	21	96	23	33	1	236	547
UNIVERSITY OF WASHINGTON 9113	53	97	325	65	56	596	49	32	1	63	39	25	43	48	2	302	898
WAYNE STATE UNIVERSITY 3433	7	7	135			149			1	8	31		3			43	192
WEST VIRGINIA UNIVERSITY 5517	3	1	49	3	24	80	8				6	29	1	4	2	50	130
WESTERN RESERVE UNIV 3159	2		206			208		1	9	22	61	3	20	12	9	137	345
UNIVERSITY OF WISCONSIN 3527	156	284	1061	186	377	2064	503	117	20	202	551	537	256	359	184	2729	4793
WOMANS MED COLLEGE OF PA 2398									1							1	1
WOODSTOCK COLLEGE 5230																	
WORCESTER POLYTECH INST 1464		2			1	3											3
UNIVERSITY OF WYOMING 8301			10	12		22	11			2		3			3	19	41
YALE UNIVERSITY 1618	105	330	571	149	267	1422	92	86	16	76	86	100	121	153	40	770	2192
YESHIVA UNIVERSITY 2199																	
UNKN DEFUNCT NON-ACCREDT	1		3	1		5	4			2						6	11
TOTAL	4942	9618	23697	3743	10209	52209	5122	1775	767	4135	4134	4356	3211	6127	2202	31829	84038

Appendix 3

DOCTORATE PRODUCTION BY INSTITUTION, 1920-1961 COMBINED: SOCIAL SCIENCES, ARTS, AND PROFESSIONS

Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, Misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professional	Business Administration	Religion-Theology	Professional, Misc.	TOTAL ARTS-PROFESSIONAL	Education	TOTAL SOC. SCI.-ARTS-EDUC.	TOTAL ALL FIELDS
27		29	3	7			66									75	141	463
85	3	26	17	19	10	13	173	18	25	2	3				48	74	295	842
96	13	65	40	48	46	51	359	143	59	17	16	30		11	276	186	821	1719
16		4		1		1	22	5			14				19	194	235	427
				14			14	1							1	6	21	151
167	1	3	2	56	3	9	241	66	29	2	51			4	152	107	500	845
143	10	177	576	405	134	70	1515	338	318	37	249	45		46	1033	490	3038	7831
																		1
													18		18		18	18
																		3
4							4									103	107	148
231	85	118	118	270	152	6	980	558	373	166	122		324	197	1740	359	3079	5271
46		1	1	11	1	1	61		7	1	1		31		40	25	126	126
1		1		3			5	2		2	20		6		30	6	41	52
11080	1106	3211	6882	7455	4022	1296	35052	7267	5837	2524	4399	1722	2892	1553	26194	26363	87609	171647

Appendix 4

U.S. INSTITUTIONS OF BACCALAUREATE ORIGIN OF DOCTORATES IN TEN MAJOR FIELDS, 1920-1961 COMBINED

	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
ABILENE CHRISTIAN COLL 7402		1	3		1	5	7	12	1	13	31	27	72	84
ADAMS STATE COLLEGE 8401			2			2		2		4	2	11	17	19
ADELPHI COLLEGE 2101	1		11			12	7	19	21	8	15	23	67	86
ADRIAN COLLEGE 3401	1		7	1		9	7	16	2		7	8	17	33
AGNES SCOTT COLLEGE 5802	2		10			12	12	24	2	7	23	2	34	58
AGRIC & MECH CO OF TEXAS 7401	9	16	42	6	68	141	170	311	5	32	8	32	77	388
AGRI MECH AND NORMAL COL 7102			1			1	4	5		2	2	5	9	14
AGRIC & TECH COL OF N C 5601		1				1	10	11		6	3	10	19	30
UNIVERSITY OF AKRON 3155	2	13	54		6	75	20	95	16	28	32	18	94	189
ALABAMA AGRI & MECH COLL 6319							1	1	1		1	5	7	8
ALABAMA COLLEGE 6301										3	5	6	14	14
ALABAMA STATE COLLEGE 6306									1	1		18	20	20
UNIVERSITY OF ALABAMA 6325	11	22	33	10	14	90	58	148	22	77	74	94	267	415
UNIVERSITY OF ALASKA 9400	1	1	1	4	3	10	2	12	1	3	2		6	18
COLLEGE AT ALBANY 2162	7	3	26	1	1	38	15	53	16	23	38	131	208	261
ALBANY STATE COLLEGE 5803	1					1		1						1
ALBERTUS MAGNUS COLLEGE 1601			1			1	5	6			6	3	9	15
ALBION COLLEGE 3402	6	16	13	1	2	38	24	62	6	24	39	34	103	165
ALBRIGHT COLLEGE 2301	1	2	22		1	26	17	43	2	5	11	19	37	80
ALCORN AGRIC & MECH COLL 6401							3	3		2	1	8	11	14
ALDERSON BROADDUS COLL 5501										2			2	2
ALFRED UNIVERSITY 2102	5	5	28	3	33	74	17	91	4	7	11	26	48	139
ALLEGHENY COLLEGE 2302	4	17	52	6		79	41	120	23	25	43	37	128	248
ALLEN UNIVERSITY 5701	1					1		1		1		4	5	6
ALLIANCE COLLEGE 2303			1			1	1	2		1			1	3
ALMA COLLEGE 3403	1	1	20			22	18	40	1	4	10	10	25	65
ALMA WHITE COLLEGE 2201												1	1	1
ALVERNO COLLEGE 3501	1	1	1			3		3		1	1	1	3	6
AM CONSERVATORY OF MUSIC 3303											11	4	15	15
AMERICAN INTERNATIONAL C 1401		2	7			9	9	18	5	4	3	9	21	39
AMERICAN UNIVERSITY 5301	2	1	12			15	17	32	7	37	15	7	66	98
AMHERST COLLEGE 1402	13	41	65	15	6	140	41	181	21	127	134	27	309	490
ANDERSON COL & THEOL SEM 3201							1	1	2	2	13	10	27	28
ANDOVER NEWTON THEOL SCH 1403											3		3	3
ANDREWS UNIVERSITY 3411	1	7	11			19	16	35		7	15	28	50	85
ANNHURST COLLEGE 1619											1		1	1
ANTIOCH COLLEGE 3102	8	20	50	10	6	94	31	125	57	40	16	22	135	260

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U.S. INSTITUTIONS OF BACCALAUREATE ORIGIN OF DOCTORATES IN TEN MAJOR FIELDS, 1920-1961 COMBINED

	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
APPALACHIAN ST TEACH COL 5602	1					1	1	2		5	1	22	28	30
AQUINAS COLLEGE 3404			3			3	2	5			1		1	6
ARIZONA STATE COLLEGE 8602			3			3	2	5		4	1	13	18	23
ARIZONA STATE UNIVERSITY 8603	2		12	1		15	14	29	7	4	11	43	65	94
UNIVERSITY OF ARIZONA 8604	7	15	54	14	19	109	83	192	23	59	39	34	155	347
ARKANSAS AGRI AND MECH C 7103	1		1			2	4	6	1	1		10	12	18
ARKANSAS COLLEGE 7105			6			6		6	2	1	5	1	9	15
ARKANSAS POLYTECHNIC COL 7106							3	3			1	1	2	5
ARKANSAS STATE COLLEGE 7108		1	7		1	9	4	13	1	4	5	11	21	34
ARKANSAS ST TEACHERS COL 7107	3	2	6			11	1	12	1	5	5	40	51	63
UNIVERSITY OF ARKANSAS 7120	11	13	57	5	22	108	111	219	18	56	46	46	166	385
ARMSTRONG COLLEGE 9301											1	1	2	2
ASBURY COLLEGE 6101		1	1			2	2	4	5	9	51	22	87	91
ASHLAND COLLEGE 3103	2		10			12	4	16	1	4	7	12	24	40
ASSUMPTION COLLEGE 1404			2		1	3	1	4		5	7		12	16
ATHENAEUM OF OHIO THE 3170		1				1	1	2		2	7	1	10	12
ATHENS COLLEGE 6308			1			1		1			1	1	2	3
ATLANTA UNIVERSITY 5805	1		2			3	11	14	2	12	11	18	43	57
ATLANTIC CHRISTIAN COLL 5604							1	1		4	1	10	15	16
ATLANTIC UNION COLLEGE 1405	1	2	1			4	1	5		3	4	4	11	16
AUBURN UNIVERSITY 6302	9	22	45		23	99	117	216	7	24	15	53	99	315
AUGSBURG COL & THEOL SEM 4101		1	1			2	3	5	7	8	4	9	28	33
AUGUSTANA THEOL SEMINARY 3304										1	2		3	3
AUGUSTANA COLLEGE ILL 3307	3	1	36	23	1	64	17	81	6	29	17	24	76	157
AUGUSTANA COLLEGE S D 4501		2	10			12	3	15	2	8	15	12	37	52
AURORA COLLEGE 3305			3			3	5	8	1	2	4	8	15	23
AUSTIN COLLEGE 7404	1	1	11			13	5	18	2	8	7	9	26	44
AUSTIN PEAY STATE COLL 6202							2	2	1	2	1	4	8	10
AUSTIN PRESBY THEOL SEM 7405							1	1						1
BABSON INST OF BUS ADMIN 1406											1		1	1
AZUSA COLLEGE 9378										1			1	1
BABSON INST OF BUS ADMIN 1406										2			2	2
BAKER UNIVERSITY 4701	3	2	20			25	7	32	9	18	33	30	90	122
BALDWIN-WALLACE COLLEGE 3105	3	4	20		2	29	10	39	9	21	28	18	76	115
BALL STATE TEACHERS COLL 3203	5	2	6	1		14	8	22	7	12	8	81	108	130
UNIVERSITY OF BALTIMORE 5225										1	1		2	2
BANGOR THEOLOGICAL SEM 1101											2		2	2

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U.S. INSTITUTIONS OF BACCALAUREATE ORIGIN OF DOCTORATES IN TEN MAJOR FIELDS, 1920-1961 COMBINED

	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
BARAT COL OF THE SACR HT 3306			1			1	2	3		4	4	3	11	14
BARD COLLEGE 2104	3		3			6	8	14	4	11	9	1	25	39
BARNARD COLLEGE 2118	4	9	20	1		34	42	76	36	32	41	16	125	201
BARRY COLLEGE 5901												1	1	1
BATES COLLEGE 1102	5	9	39	8	2	63	59	122	10	29	39	55	133	255
BAYLOR UNIVERSITY 7406	6	15	38	5		64	45	109	21	63	78	51	213	322
BEAVER COLLEGE 2304									1		3	1	5	5
BELLHAVEN COLLEGE 6402	1					1		1		1		1	2	3
BELLARMINE COLLEGE 6131			3			3		3						3
BELMONT ABBEY COLLEGE 5606										1	3		4	4
BELOIT COLLEGE 3503	1	11	38	10	1	61	31	92	2	50	20	13	85	177
BEMIDJI STATE COLLEGE 4120	1					1	5	6	3	3	2	16	24	30
BENEDICT COLLEGE 5703							1	1			6	2	8	9
BENEDICTINE HEIGHTS COLL 7327										2			2	2
BENNETT COLLEGE 5607							2	2		1		3	4	6
BENNINGTON COLLEGE 1301							1	1	1	1		1	3	4
BEREA COLLEGE 6102	5	10	21	7	2	45	44	89	10	46	19	28	103	192
BERRY COLLEGE 5808		4	5		1	10	5	15		3	2	5	10	25
BETHANY BIBLICAL SEM 3308											1		1	1
BETHANY COLLEGE KAN 4702	1	2	9			12	6	18		6	9	9	24	42
BETHANY COLLEGE W VA 5503	4	4	17		4	29	21	50	6	12	10	20	48	98
BETHANY NAZARENE COLLEGE 7302			6			6	1	7	3	6	9	11	29	36
BETHEL COLLEGE KAN 4703	3	5	7			15	8	23	7	9	18	12	46	69
BETHEL COLLEGE TENN 6203	1		1			2	1	3			4	8	12	15
BETHEL COLL AND SEMINARY 4103										1	2		3	3
BETHUNE-COOKMAN COLLEGE 5902												2	2	2
BIBLE INST OF L ANGELES 9372										1			1	1
BIBLICAL SEM IN NEW YCRK 2007										1		1	2	2
BIRMINGHAM-SOUTHERN CCLL 6310	7	8	20	1	1	37	15	52	15	32	41	31	119	171
BISHOP COLLEGE 7407											1	7	8	8
BLACKBURN COLLEGE 3309			2			2	7	9		3	1		4	13
BLACK HILLS TEACHERS COL 4502			1			1		1		1		5	6	7
BLOOMFIELD CO & THEO SEM 2202										1	4		5	5
BLOOMSBURG STATE COLLEGE 2348			1			1	3	4	1	3	3	23	30	34
BLUE MOUNTAIN COLLEGE 6403									2	1	3	4	10	10
BLUEFIELD STATE COLLEGE 5504							1	1		1	1	4	6	7
BLUFFTON COLLEGE 3106	2		12			14	9	23	4	11	10	13	38	61

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U.S. INSTITUTIONS OF BACCALAUREATE ORIGIN OF DOCTORATES IN TEN MAJOR FIELDS, 1920-1961 COMBINED

	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
BOB JONES UNIVERSITY 5705			2			2	1	3		1	4		5	8
BOSTON COLLEGE 1408	3	20	54	3	2	82	25	107	13	66	77	57	213	320
BOSTON CONSERV OF MUSIC 1470											1		1	1
STATE COLL AT BOSTON 1455							4	4			3	8	11	15
BOSTON UNIVERSITY 1409	11	20	45	10	1	87	51	138	67	94	147	189	497	635
BOUVE-BOSTON SCHOOL 1410												1	1	1
BOWDOIN COLLEGE 1103	6	23	32	3	6	70	36	106	7	50	93	18	168	274
BOWLING GREEN COL OF COM 6104										2	3	8	13	13
BOWLING GREEN STATE UNIV 3104	5	4	25	2	1	37	14	51	12	24	21	42	99	150
BRADFORD DURFEE COL OF T 1471			3			3		3						3
BRADLEY UNIVERSITY 3310	2	4	35	2	5	48	11	59	7	14	13	25	59	118
BRANDEIS UNIVERSITY 1465			1			1	1	2	4	5	2		11	13
BRENAU COLLEGE 5810										4	2	2	8	8
BRIAR CLIFF COLLEGE 4201										1			1	1
UNIVERSITY OF BRIDGEPORT 1621							1	1	3			8	11	12
BRIDGEWATER COLLEGE 5406	3		11	2		16	12	28	6	14	13	17	50	78
STATE COL AT BRIDGEWATER 1429	2		3	1		6	2	8		5	3	43	51	59
BRIGHAM YOUNG UNIVERSITY 8701	1	32	59	17	12	121	191	312	29	73	93	109	304	616
COLLEGE AT BROCKPORT 2147							1	1	4	2	1	21	28	29
BROOKLYN COLLEGE 2105	77	136	244	18	9	484	199	683	284	164	179	150	777	1460
BROOKLYN LAW SCHOOL 2106										5	4		9	9
BROWN UNIVERSITY 1501	31	49	155	20	17	272	123	395	64	93	110	42	309	704
BRYANT COLLEGE 1502							1	1		1		3	4	5
BRYN MAWR COLLEGE 2305	9	4	19	3	1	36	25	61	23	68	93	7	191	252
BUCKNELL UNIVERSITY 2306	12	6	35	1	19	73	45	118	37	18	32	48	135	253
BUENA VISTA COLLEGE 4202		1	5			6	3	9		2	2	15	19	28
COLLEGE AT BUFFALO 2148	2				1	3	4	7	8	12	6	109	135	142
UNIVERSITY OF BUFFALO 2193	24	43	80	5	5	157	57	214	54	37	40	63	194	408
BUTLER COLLEGE 7409	2		2			4		4		3	1		4	8
BUTLER UNIVERSITY 3204	4	5	23			32	46	78	10	19	42	36	107	185
CALIF COL OF ARTS AND CR 9304												1	1	1
CALIF COLL OF MEDICINE 9314		1				1		1						1
CALIF INST OF TECHNOLOGY 9305	50	202	150	76	173	651	59	710	10	7	11	1	29	739
CALIF STATE POLYTECH COL 9306		1		1	2	4	24	28		1			1	29
CALIF STATE COLLEGE 2349		1				1		1	11	5		49	65	66
UNIV OF CALIFORNIA BERK 9356	131	325	519	104	207	1286	941	2227	204	633	399	343	1579	3806

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U.S. INSTITUTIONS OF BACCALAUREATE ORIGIN OF DOCTORATES IN TEN MAJOR FIELDS, 1920-1961 COMBINED

	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
UNIV CF CALIFORNIA DAVIS 9366			6			6	79	85		4		4	8	93
UNIV CF CALIFORNIA L A 9365	66	113	188	56	31	454	245	699	214	284	212	213	923	1622
UNIV CF CALIF RIVERSICE 9369			6			6		6	1	1			2	8
UNIV CF CALIFORNIA SAN F 9367			2			2	1	3		1	1	1	3	6
UNIV OF CALIF SANTA BARB 9368		2	4	1		7	18	25	9	20	19	52	100	125
CALVIN COLLEGE 3405	2	3	41		4	50	24	74	10	15	53	17	95	169
CALVIN THEOLOGICAL SEMIN 3406												1	1	1
CANISIUS COLLEGE 2107	4	13	34		2	53	8	61	4	11	13	19	47	108
CAPITAL UNIVERSITY 3108		6	19			25	13	38	1	9	33	14	57	95
CARDINAL GLENNON COLLEGE 4320												1	1	1
CARCINAL STRITCH CO THE 3504			1			1	1	2		2		1	3	5
CARLETON COLLEGE 4104	5	24	55	17	4	105	47	152	16	48	53	25	142	294
CARNEGIE INST OF TECHNOL 2307	41	124	94		211	470	11	481	9	11	32	32	84	565
CARROLL COLLEGE WISC 3505			14			14	13	27	4	17	12	13	46	73
CARROLL COLLEGE MONT 8102	3	3	5			11	7	18		1	1		2	20
CARSON NEWMAN COLLEGE 6204		1	14			15	6	21	3	8	9	14	34	55
CARTHAGE COLLEGE 3311	2		20		1	23	7	30	2	1	17	10	30	60
CASCACE COLLEGE 9201		1				1		1		1	4	1	6	7
CASE INST OF TECHNOLOGY 3109	16	83	66		87	252	10	262		2	3	2	7	269
CASTLETON ST TEACH COLL 1302												3	3	3
CATAWBA COLLEGE 5610	1	4	6			11	5	16	2	2	5	16	25	41
CATHECRAL CO OF IM CONC 2108									1	1	5	2	9	9
CATHOLIC TEACHERS COLL 1503										1		2	3	3
CATHOLIC UNIV OF AMERICA 5302	10	20	32	1	10	73	33	106	23	90	585	74	772	878
CEDAR CREST COLLEGE 2308							3	3		1			1	4
CENTENARY COLLEGE 7201	1	2	20	1	1	25	4	29	3	4	6	10	23	52
CENTRAL BAPT THEOL SEMIN 4704												1	1	1
CENTRAL COLLEGE 4203	1	1	12		1	15	9	24	6	5	11	18	40	64
CENTRAL CONN STATE COLL 1612	3		6			9	1	10		12	3	44	59	69
CENTRAL METHODIST COLL 4301	4	7	48	2		61	16	77		9	22	24	55	132
CENTRAL MICHIGAN UNIV 3407		1	5	1		7	8	15	6	14	18	59	97	112
CENTRAL MISSOURI ST COLL 4302	8	3	10			21	16	37	4	22	15	110	151	188
CENTRAL STATE COLLEGE OH 3171										1	3	5	9	9
CENTRAL STATE COLL OKLA 7305	2	3	3			8	9	17	1	7	9	44	61	78
CENTRAL WASH STATE COLL 9101		1	2			3		3		9	2	40	51	54
CENTRE COLL OF KENTUCKY 6106		2	14	1	1	18	8	26	3	9	12	5	29	55
CHAPMAN COLLEGE 9307							1	1	3	5	6	7	21	22

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COLLEGE OF CHARLESTON 5711	2	3	19		1	25	16	41	1	7	17	1	26	67
CHATHAM COLLEGE 2346			3			3	6	9	2	2	4	4	12	21
UNIV OF CHATTANOOGA 6239		8	15			23	7	30	6	15	24	8	53	83
CHESTNUT HILL COLLEGE 2309			1			1		1	3	1	5	1	10	11
CHEYNEY STATE COLLEGE 2310												4	4	4
CHICAGO CONSERVATORY COL 3314												3	3	3
CHICAGO-KENT COLL OF LAW 3316										1	2	1	4	4
CHICAGO LUTHER THEO SEM 3323												1	1	1
CHICAGO TEACHERS COLLEGE 3320			1			1	4	5	8	6	6	26	46	51
CHICAGO THEOLOG SEMINARY 3322											1		1	1
UNIVERSITY OF CHICAGO 3387	158	233	429	118	19	957	477	1434	247	612	517	235	1611	3045
CHICO STATE COLLEGE 9308	1		3	1	1	6	12	18	3	7	2	36	48	66
CHRISTIAN BROTHERS COLL 6250										1			1	1
CHURCH DIV SCH OF PACIF 9309											1		1	1
CINCINNATI BIBLE SEMIN 3176										1	4	1	6	6
UNIVERSITY OF CINCINNATI 3156	21	39	67	11	49	187	69	256	32	75	94	62	263	519
CITADEL THE 5706	3	8	28		8	47	5	52	3	11	7	6	27	79
CITY COLLEGE OF NEW YORK 2188	142	213	561	45	177	1138	370	1508	480	370	386	510	1746	3254
CLAFLIN COLLEGE 5707							1	1	1	1	1	3	6	7
CLAREMONT UNIV COLLEGE 9310											2	2	4	4
CLAREMONT MENS COLLEGE 9374										5	1		6	6
CLARION STATE COLLEGE 2350							1	1		2		14	16	17
CLARK COLLEGE 5812	1					1	1	2		2	8	7	17	19
CLARK UNIVERSITY 1412	5	9	58	3	1	76	46	122	33	73	38	31	175	297
CLARKE COLLEGE 4204			1			1	1	2		4	8	4	16	18
CLARKSON COLLEGE OF TECH 2109	1	1	16		14	32	1	33		1	1	2	4	37
CLEMSON AGRICULTURAL COL 5708	1	8	38		24	71	117	188		20	2	19	41	229
CLEVELAND INST OF MUSIC 3115											3	2	5	5
COE COLLEGE 4205	1	9	32	7		49	19	68	12	23	15	32	82	150
COKER COLLEGE 5710	1					1	4	5		1	2		3	8
COLBY COLLEGE 1104	3	3	13	4		23	8	31	7	17	29	28	81	112
COLGATE ROCHESTER DIV SC 2114									1		2	1	4	4
COLGATE UNIVERSITY 2115	8	11	48	10	3	80	18	98	18	48	45	47	158	256
COL CONS OF MUSIC OF CIN 3112										1	12	4	17	17
COLLEGE MISERICORDIA 2311									1	3	3	2	9	9
COLORADO COLLEGE 8403	6	20	16	4	2	48	37	85	18	19	34	11	82	167
COLORADO SCHOOL OF MINES 8404		3	2	41	25	71	1	72		1			1	73

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	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
COLORADO STATE COLLEGE 8405	2		7		1	10	42	52	9	23	32	152	216	268
COLORADO STATE UNIV 8402	8	6	22		7	43	177	220	5	11	6	31	53	273
UNIVERSITY OF COLORADO 8411	15	52	112	23	63	265	109	374	50	118	80	74	322	696
COLUMBIA BIBLE UNIV 5712											1	2	3	3
COLUMBIA COLLEGE ILL 3325			3			3	2	5			1	1	2	7
COLUMBIA COLLEGE S C 5713							1	1		2	1		3	4
COLUMBIA THEOLOGICAL SEM 5813										1			1	1
COLUMBIA UNION COL 5318	2		4		1	7	9	16	1	7	12	10	30	46
COLUMBIA UNIVERSITY 2116	80	140	220	55	135	630	232	862	169	364	485	585	1603	2465
IMMACUL CONCEPTION SEM 4305											1		1	1
CONCORD COLLEGE 5505			2	1		3	9	12	1	6	3	10	20	32
CONCORDIA COLLEGE 4110	7	11	9			27	8	35	9	9	14	17	49	84
CONCORDIA SEMINARY 4306			1			1	2	3	6	16	35	11	68	71
CONCORDIA TEACH COLL ILL 3326	1	1				2	1	3	2	2	3	10	17	20
CONCORDIA TEACH COLL NEB 4602									2	3	1	4	10	10
CONCORDIA THEOL SEMINARY 3327		1				1		1		1	3		4	5
CONNECTICUT COLLEGE 1604	1		4			5	14	19	6	4	9	4	23	42
UNIV OF CONNECTICUT 1615	2	8	44	8	17	79	171	250	41	51	17	31	140	390
CONVERSE COLLEGE 5714										1	3	4	8	8
COOPER UNION 2119	12	24	32	1	75	144	6	150	2	2	1		5	155
COPPIN ST TEACHERS COLL 5203												1	1	1
CORNELL COLLEGE 4206	10	12	32	6	4	64	19	83	11	30	34	50	125	208
CORNELL UNIVERSITY 2120	66	167	308	56	179	776	714	1490	94	282	258	127	761	2251
UNIV OF CORPUS CHRISTI 7466												2	2	2
COLLEGE AT CORTLAND 2149							2	2		1	1	33	35	37
COSMOPOLITAN SCH OF MUS 3328											1		1	1
CREIGHTON UNIVERSITY 4603	3	2	21		1	27	23	50	6	19	29	13	67	117
CULVER STOCKTON COLLEGE 4309		1	8			9	1	10	2	1	8	9	20	30
CUMBERLAND UNIVERSITY 6205			1			1		1		2	3	6	11	12
CURRY COLLEGE 1415											1	2	3	3
CURTIS INST OF MUSIC THE 2401											5		5	5
DAKOTA WESLEYAN UNIV 4503	1	1	14		1	17	5	22	6	6	9	17	38	60
UNIVERSITY OF DALLAS 7420											1		1	1
DANA COLLEGE 4604			4			4	1	5	2	2	4	3	11	16
DANBURY STATE COLLEGE 1605									1	1		5	7	7
DARTMOUTH COLLEGE 1201	13	27	102	45	12	199	101	300	46	166	163	59	434	734
DAVID LIPSCOMB COLLEGE 6247	2	1	3			6	2	8	3		8	5	16	24
DAVIDSON COLLEGE 5611	4	23	32		3	62	11	73	12	38	51	25	126	199

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DAVIS AND ELKINS COLLEGE 5506	1		5			6	8	14	1	4	4	6	15	29
UNIVERSITY OF DAYTON 3154	12	7	21	2	17	59	16	75	5	19	31	17	72	147
DEFIANCE COLLEGE 3121	1		3			4	3	7		2		10	12	19
DELAWARE STATE COLLEGE 5101					1	1		1		1		1	2	3
UNIVERSITY OF DELAWARE 5103	4	4	31		14	53	39	92	7	15	18	13	53	145
DELAWARE VAL COL SCI AGR 2345							1	1						1
DELTA STATE COLLEGE 6405	2					2	4	6		1	3	9	13	19
DENISON UNIVERSITY 3122	16	18	30	19		83	21	104	25	42	40	26	133	237
UNIVERSITY OF DENVER 8410	6	17	47	1	19	90	61	151	58	56	80	117	311	462
DEPAUL UNIVERSITY 3329	8	9	25		1	43	14	57	7	19	50	23	99	156
DEPAUW UNIVERSITY 3207	6	31	102	23	4	166	115	281	43	84	104	63	294	575
DETROIT BIBLE COLLEGE 3440			1			1		1						1
DETROIT INST OF MUS ART 3409												2	2	2
DETROIT INST OF TECH 3410			4		2	6	2	8			1		1	9
UNIVERSITY OF DETROIT 3429	4	4	30		18	56	21	77	11	12	22	11	56	133
DICKINSON COLLEGE 2313	2	6	23	1	1	33	14	47	14	31	48	43	136	183
DICKINSON ST TEACHER COL 4403									1	2		7	10	10
DILLARD UNIVERSITY 7203	1		3			4	3	7	1	3	3	2	9	16
D C TEACHERS COLLEGE 5310	2	2	2			6	3	9	1		3	18	22	31
DIV SCH PROT EPISC CH 2403									1		2		3	3
DOANE COLLEGE 4605		4	14	1		19	8	27	6	17	3	7	33	60
DOMINICAN COLLEGE 3539												1	1	1
DOMINICAN COL OF SAN RAF 9317			1			1	1	2			3	1	4	6
DON BOSCO COLLEGE 2233							1	1			2		2	3
DOUGLASS COLLEGE 2237	3		4			7	6	13	5	3	3	3	14	27
DOWNSTATE MEDICAL CENTER 2137							1	1						1
DRAKE UNIVERSITY 4208	4	5	13	1		23	26	49	17	35	41	48	141	190
DREW UNIVERSITY 2230	4	6	24	1		35	19	54	17	10	19	12	58	112
DREXEL INSTITUTE OF TECH 2314		7	20		50	77	3	80		4	5	5	14	94
DROPSIE COLLEGE 2315											1		1	1
DRURY COLLEGE 4310	2	5	12	5	1	25	12	37	2	19	18	25	64	101
UNIVERSITY OF DUBUQUE 4223		1	8			9	10	19	8	13	12	8	41	60
DUCHESNE COL OF SAC HT 4606			2			2		2	1	4	5	3	13	15
DUKE UNIVERSITY 5612	17	38	59	5	20	139	60	199	30	85	82	49	246	445
DUNBARTON COL OF HOLY CR 5305			2			2		2						2
DUNS SCOTUS COLLEGE 3441									2	2	4		8	8
DUQUESNE UNIVERSITY 2316	4		29	1		34	20	54	9	13	21	32	75	129

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DYOUVILLE COLLEGE 2121			1			1	1	2	1	5	8	3	17	19
EARLHAM COLLEGE 3208	2	10	16	2		30	42	72	6	33	29	12	80	152
EAST CAROLINA COLLEGE 5613			1			1	3	4	1	1	1	19	22	26
EAST CENTRAL STATE COLL 7307							4	4	1	6	6	28	41	45
E STROUDSBURG ST COLL 2351							1	1	1	3		31	35	36
EAST TENNESSEE ST COLL 6207	1	1	8			10	3	13		7	4	26	37	50
EAST TEXAS BAPTIST COLL 7414									1			2	3	3
EAST TEXAS STATE COLLEGE 7415	2	3	10			15	6	21	3	12	20	51	86	107
EASTERN BAPTIST COLLEGE 2363												3	3	3
EASTERN BAPT THEOL SEMIN 2404										3	4	5	12	12
EASTERN ILLINOIS UNIV 3330	3	1	9	2		15	30	45		16	19	43	78	123
EASTERN KENTUCKY ST COLL 6109	1	1	14		1	17	13	30		4	7	28	39	69
EASTERN MICHIGAN UNIV 3419	2	6	22	2	2	34	18	52	7	12	15	86	120	172
EASTERN MENNONITE COLL 5408							1	1						1
EASTERN MONT COL OF EDUC 8103												1	1	1
EASTERN NAZARENE COLLEGE 1416	1		6			7	3	10		3	10	3	16	26
EASTERN NEW MEXICO UNIV 8502	1		4			5	1	6	1	1	3	6	11	17
EASTERN OREGON COLLEGE 9202												6	6	6
EASTERN WASH STATE COLL 9103	1		1			2	4	6	1	6	5	30	42	48
EDEN THEOLOGICAL SEMIN 4311											2		2	2
EDGEWOOD CO OF THE SAC H 3508							1	1			2		2	3
EDINBORO STATE COLLEGE 2352	1					1	4	5		3	4	26	33	38
ELIZABETH CTY ST TEACH C 5631			1			1		1				1	1	2
ELIZABETHTOWN COLLEGE 2317		2	6			8	3	11	2	6	7	21	36	47
ELLENDALE ST TEACHERS CO 4409									1			7	8	8
ELMHURST COLLEGE 3331			8			8	9	17	3	7	14	6	30	47
ELMIRA COLLEGE 2122			2			2	4	6	3	1	6	9	19	25
ELON COLLEGE 5614		1	2		1	4	6	10		1	6	12	19	29
EMERSON COLLEGE 1417											14	6	20	20
EMMANUEL COLLEGE 1418	4		3			7	5	12		2	13	5	20	32
EMORY AND HENRY COLLEGE 5409	1	5	10	1		17	3	20	3	19	15	10	47	67
EMORY UNIVERSITY 5815	7	16	94	9	4	130	71	201	21	57	91	26	195	396
COLLEGE OF EMPORIA 4706	2	5	4			11	5	16	5	9	14	18	46	62
EPISCOPAL THEOLOG SCHOOL 1419										1	1		2	2
ERSKINE COLLEGE 5716	1		9		1	11	2	13		5	13	11	29	42
EUREKA COLLEGE 3332	1		5			6	3	9	2	4	11	8	25	34
EVANSVILLE COLLEGE 3209	2	2	15		1	20	5	25	3	6	7	13	29	54

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FAIRFIELD UNIVERSITY 1620		1	1			2	4	6			1		1	7
FAIRLEIGH DICKINSON UNIV 2232			3			3		3			2	1	3	6
FAIRMONT STATE COLLEGE 5507	1	3	2			6	7	13	1	2	5	15	23	36
FAITH THEOL SEMINARY 2412											1		1	1
FARMINGTON ST TEACH COLL 1106												3	3	3
FAYETTEVILLE ST TEACH CO 5615										1		2	3	3
FENN COLLEGE 3123		3	7		9	19	1	20	5	1	3	2	11	31
FERRIS INSTITUTE 3412			2			2	3	5				5	5	10
FINDLAY COLLEGE 3124	1		2			3		3	4	3	5	9	21	24
FISK UNIVERSITY 6208	1	2	5			8	7	15	3	17	13	26	59	74
STATE COLL AT FITCHBURG 1430							2	2		2		26	28	30
FLORENCE STATE COLLEGE 6303			4			4	3	7		3		9	12	19
FLORIDA AG AND MECH UNIV 5904							3	3		4	2	8	14	17
FLORIDA SOUTHERN COLLEGE 5906	1	1	14			16	6	22	1	8	12	13	34	56
FLORIDA STATE UNIVERSITY 5907	2	4	6	2		14	13	27	20	21	27	39	107	134
UNIVERSITY OF FLORIDA 5912	24	21	99	3	22	169	169	338	52	71	51	99	273	611
FONTBONNE COLLEGE 4352	1					1		1	1	1	5	2	9	10
FORDHAM UNIVERSITY 2123	7	17	94	2	4	124	79	203	55	58	122	80	315	518
CO OF FORESTRY AT SYRAC 2046		1	6			7	20	27		1		1	2	29
FORT HAYS KANSAS ST COLL 4709	4	3	10			17	19	36	18	14	7	26	65	101
FORT VALLEY STATE COLL 5816												4	4	4
FORT WAYNE BIBLE COLLEGE 3242												1	1	1
STATE COLL AT FRAMINGHAM 1431							4	4				3	3	7
FRANKLIN & MARSHALL COLL 2318	5	18	94	12	2	131	37	168	26	38	35	56	155	323
FRANKLIN COL OF INDIANA 3211	1	3	9			13	6	19	2	9	18	16	45	64
FRANKLIN UNIVERSITY 3125			1			1		1						1
COLLEGE AT FREDONIA 2150												31	31	31
FRESNO STATE COLLEGE 9318	3	7	12	3		25	18	43	12	14	14	33	73	116
FRIENDS UNIVERSITY 4708		9	4			13	8	21	5	5	7	14	31	52
FROSTBURG ST TEACHERS CO 5211							1	1				3	3	4
FULLER THEOLOG SEMINARY 9375			1			1		1						1
FURMAN UNIVERSITY 5718	2	11	15	1		29	19	48	7	19	45	24	95	143
GALLAUDET COLLEGE 5306											1		1	1
GANNON COLLEGE 2319			4			4	1	5	1	1			2	7
GARRETT BIBLICAL INST 3336											2		2	2
GENERAL BEADLE ST TEACH 4504			2			2		2		1	1	5	7	9
GENERAL MOTORS INST 3436					1	1		1	2				2	3

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GENERAL THEOLOG SEMINARY 2009											2		2	2
COLLEGE AT GENESEO 2151	1		1			2		2	2	1	1	12	16	18
GENEVA COLLEGE 2320	2	6	16		1	25	15	40	13	9	11	34	67	107
GEORGE FOX COLLEGE 9223				1		1		1		1	2	2	5	6
GEO PEABODY CO FOR TCHRS 6210	1		5			6	18	24	20	22	31	108	181	205
GEORGE WASHINGTON UNIV 5307	12	24	78	7	10	131	117	248	61	101	82	45	289	537
GEORGE WILLIAMS COLLEGE 3337		2			1	3	5	8	4	2	1	13	20	28
GEORGETOWN COLLEGE 6110	7	3	12			22	3	25	3	12	19	15	49	74
GEORGETOWN UNIVERSITY 5308	4	6	17	1	2	30	19	49	4	61	49	6	120	169
GEORGIA INST OF TECHNCL 5820	9	32	49	3	94	187	5	192	3	12	11	7	33	225
WOMANS COLL OF GEORGIA 5822	2		1			3	4	7		4	4	13	21	28
GEORGIA STATE COL BUS AD 5821											1	2	3	3
GEORGIA SOUTHERN COLLEGE 5824	1					1	4	5		4	6	27	37	42
UNIVERSITY OF GEORGIA 5841	8	14	42	3	4	71	125	196	22	47	46	62	177	373
GEORGIAN COURT COLLEGE 2207	1		1			2	1	3			3	6	9	12
GETTYSBURG COLLEGE 2321	6	9	36	1	3	55	19	74	12	23	35	27	97	171
GLASSBORO STATE COLLEGE 2212									1	1	1	23	26	26
GLENVILLE STATE COLLEGE 5508			1			1	5	6		2	3	20	25	31
GODDARD COLLEGE 1310										1		1	2	2
GOLDEN GATE COLLEGE 9321												2	2	2
GONZAGA UNIVERSITY 9104	3	3	14	1	5	26	5	31	9	42	44	13	108	139
GOOD COUNSEL COLLEGE 2124										2	3	2	7	7
GORDON COLLEGE 1421									1	6	18	7	32	32
GORHAM ST TEACHERS COLL 1107										1	1	11	13	13
GOSHEN COLLEGE 3213	1	3	7		1	12	16	28	2	18	14	15	49	77
GOUCHER COLLEGE 5204	8	9	16			33	54	87	11	20	28	19	78	165
GRACE THEO SEM & GRACE C 3214											1		1	1
GRAMBLING COLLEGE 7205												3	3	3
COLLEGE OF GREAT FALLS 8104	1		1			2		2	2		2	3	7	9
GREENSBORO COLLEGE 5617			1			1	1	2		1	2	2	5	7
GREENVILLE COLLEGE 3339	1	3	11			15	18	33	6	10	18	32	66	99
GRINNELL COLLEGE 4210	6	8	48		4	66	25	91	21	37	54	27	139	230
GROVE CITY COLLEGE 2322	5	2	26		7	40	11	51	1	4	12	42	59	110
GUILFORD COLLEGE 5618	3	6	9			18	10	28	6	11	13	3	33	61
GUSTAVUS ADOLPHUS COLL 4113	1	1	9	1		12	20	32	10	8	21	22	61	93
HAHNEMANN MED COLL & HOS 2323							2	2						2
HAMILTON COLLEGE 2125	11	7	27	7	1	53	20	73	6	29	77	26	138	211

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	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
HAMLINE UNIVERSITY 4114	1	3	27			31	11	42	14	28	23	27	92	134
HAMPDEN-SYDNEY COLLEGE 5411	2	10	16			28	9	37	6	15	18	8	47	84
HAMPTON INSTITUTE 5412		1	2			3	14	17	1	6	8	39	54	71
HANOVER COLLEGE 3215	2	1	15	3	1	22	9	31	1	6	8	6	21	52
HARDIN SIMMONS UNIV 7416	2	1	4	2		9	7	16	1	3	18	18	40	56
HARDING COLLEGE 7110			5			5	7	12	1	5	8	16	30	42
HARPUR COLLEGE 2002		1	1			2	3	5		1	2		3	8
HARRIS TEACHERS COLLEGE 4313	2					2	2	4		2	5	15	22	26
HARTT COLLEGE OF MUSIC 1608											3		3	3
HARTFORD SEM FOUNDATION 1607									1		2	4	7	7
HARTWICK COLLEGE 2126	1	1	4			6	6	12	3	2	3	4	12	24
HARVARD UNIVERSITY 1422	131	304	307	102	60	904	253	1157	149	681	733	137	1700	2857
HASTINGS COLLEGE 4607	2	9	15			26	9	35	6	21	17	30	74	109
HAVERFORD COLLEGE 2324	21	23	67	6	4	121	32	153	19	44	99	9	171	324
UNIVERSITY OF HAWAII 9501		3	26	1	2	32	55	87	5	24	13	24	66	153
HEBREW TEACHERS COLLEGE 1488											3	1	4	4
HEBREW UNION COLL OHIO 3126											6	1	7	7
HEIDELBERG COLLEGE 3127	2	5	7			14	16	30	6	16	12	14	48	78
HENDERSON ST TEACHERS CO 7111	2	2	1			5	5	10	3	8	5	17	33	43
HENDRIX COLLEGE 7112	4	2	15			21	10	31	3	14	16	25	58	89
HIGH POINT COLLEGE 5619	1	1				2		2			1	4	5	7
HILLSDALE COLLEGE 3413		2	2	1	1	6	6	12	6	10	5	9	30	42
HIRAM COLLEGE 3128		9	36	1	1	47	14	61	4	21	22	20	67	128
HOBART & WM SMITH COLL 2112	3	9	20			32	24	56	7	23	24	16	70	126
HOFSTRA COLLEGE 2127	5	4	15	1	1	26	7	33	9	8	8	6	31	64
HOLLINS COLLEGE 5413	1					1	1	2	1	6	8		15	17
COLL OF THE HOLY CROSS 1413	3	5	36		1	45	21	66	5	21	38	20	84	150
HOLY FAMILY COLLEGE WISC 3540							1	1			1	2	3	4
HOLY NAMES COLLEGE 9106												2	2	2
COLL OF THE HOLY NAMES 9311			1			1		1	1	4	2	3	10	11
HOOD COLLEGE 5205							5	5		3	4	3	10	15
HOPE COLLEGE 3414	3	8	86		1	98	48	146	8	14	25	25	72	218
HOUGHTON COLLEGE 2128	3	2	5			10	2	12	7	7	14	20	48	60
UNIVERSITY OF HOUSTON 7459	2	5	1	2	5	15	13	28	18	6	9	18	51	79
HOWARD COLLEGE 6311	2	2	23		2	29	12	41	5	6	10	24	45	86
HOWARD PAYNE COLLEGE 7418	1		2			3	3	6	1	3	4	18	26	32
HOWARD UNIVERSITY 5309	3	5	17	1		26	26	52	19	34	26	45	124	176

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HUMBOLDT STATE COLLEGE 9323							4	4	1		2	9	12	16
HUNTER COLLEGE 2129	18	13	31	9	1	72	88	160	81	63	135	124	403	563
HUNTINGTON COLLEGE 3216							2	2		4	2	6	12	14
HUNTINGDON COLLEGE 6312			1			1	5	6		2	3	7	12	18
HURON COLLEGE 4505	2		8	2		12	2	14	2	7	6	12	27	41
HUSTON TILLOTSON COLLEGE 7457			3			3	2	5			3	5	8	13
CCLLEGE OF IDAHC 8201	1		16			17	14	31	2	2	5	11	20	51
IDAHO STATE COLLEGE 8202	1	2	9			12	19	31	3		3	2	8	39
UNIVERSITY OF IDAHO 8207	8	10	37	8	14	77	152	229	15	31	28	52	126	355
ILLINCIS COLLEGE 3340	4	3	23		2	32	14	46	5	16	12	16	49	95
ILL CCLL OF OPTOMETRY 3366											1		1	1
ILLINCIS INST OF TECHNOL 3341	26	36	60		117	239	14	253	14	12	19	20	65	318
ILLINCIS ST NORMAL UNIV 3342	3	4	14			21	21	42	6	48	23	108	185	227
UNIVERSITY OF ILLINCIS 3388	70	98	721	66	315	1270	717	1987	151	405	309	323	1188	3175
ILLINCIS WESLEYAN UNIV 3343	4	3	25		1	33	14	47	6	12	22	18	58	105
IMMACULATA COLLEGE 2325							2	2		1	6		7	9
IMMACULATE CONCEPT SEM 2208											3	2	5	5
IMMACULATE HEART COLLEGE 9324			1			1	1	2		4	7	4	15	17
INCARNATE WCRD COLLEGE 7419	1					1	3	4		2	6	4	12	16
INDIANA CENTRAL COLLEGE 3217			2			2	10	12	2	10	7	12	31	43
INDIANA STATE COLLEGE 2353	1		3			4	8	12	3	6	5	63	77	89
INDIANA ST TCHRS COLL 3218	3	6	7	1		17	32	49	9	32	27	118	186	235
INDIANA TECHNICAL COLL 3219					3	3		3						3
INDIANA UNIVERSITY 3220	22	66	152	31	7	278	155	433	84	150	173	206	613	1046
INTER AMER UNIV OF P R 9805							3	3	2			3	5	8
ICNA COLLEGE 2130		3	4	2		9		9		2		1	3	12
STATE COLLEGE OF IOWA 4211	3	9	18	1	2	33	35	68	21	65	48	170	304	372
STATE UNIVERSITY OF ICWA 4222	25	39	120	29	62	275	181	456	136	209	273	167	785	1241
ICWA ST U OF SCI & TECH 4212	36	63	171	19	131	420	441	861	37	93	16	58	204	1065
ICWA WESLEYAN COLLEGE 4213	2	2	19		1	24	18	42	1	6	7	9	23	65
ITHACA COLLEGE 2131							1	1	1	2	2	14	19	20
JACKSCN STATE COLLEGE 6407										1		3	4	4
JACKSCNVILLE STATE COLL 6304	1		1			2	4	6	2	3	1	12	18	24
JACKSCNVILLE UNIVERSITY 5908												2	2	2
JAMESTOWN COLLEGE 4401	1		12		2	15	7	22	2	6	6	13	27	49
'ARVIS CHRISTIAN COLLEGE 7422												1	1	1
JEFFERSON MED C OF PHIL 2326							6	6						6

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	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
JERSEY CITY STATE COLL 2213											2	14	16	16
JEWISH THEOL SEM OF AMER 2132									1		9	2	12	12
JOHN BROWN UNIVERSITY 7113	1		1		1	3	1	4		1	2	4	7	11
JOHN CARROLL UNIVERSITY 3129		4	9			13	5	18	3	6	17	5	31	49
JOHN HERRON ART SCHOOL 3221			1			1		1						1
JOHN MARSHALL LAW SCHOOL 3346										1			1	1
JOHNS HOPKINS UNIVERSITY 5206	29	68	140	45	135	417	97	514	43	89	96	53	281	795
JOHNSON BIBLE COLLEGE 6212							1	1		1	1	1	3	4
JOHNSON C SMITH UNIV 5621	3		3			6	5	11		2	6	14	22	33
JUDSON COLLEGE 6314									1			2	3	3
JUILLIARD SCHOOL OF MUS 2012	1					1		1			7	13	20	21
JUNIATA COLLEGE 2327		5	56	1	2	64	14	78	9	14	20	40	83	161
KALAMAZOO COLLEGE 3415	4	21	71	1		97	42	139	6	10	15	14	45	184
UNIVERSITY OF KANSAS 4727	20	55	116	28	52	271	198	469	64	140	125	120	449	918
UNIV OF KANSAS CITY 4337	2	2	14		1	19	15	34	12	15	19	17	63	97
KANS ST COLL PITTSBURG 4712		1	18		1	20	23	43	9	14	16	102	141	184
KANS ST TCHRS CO EMPORIA 4711	7	13	16	1		37	28	65	21	19	30	113	183	248
KANS ST U OF AG & AP SCI 4713	7	18	60	6	53	144	274	418	25	59	20	54	158	576
KANSAS WESLEYAN UNIV 4714	2	1	1			4		4	1	4	7	17	29	33
KEENE TEACHERS COLLEGE 1202							1	1			1	10	11	12
KENRICK SEMINARY 4316										2	1	1	4	4
KENT STATE UNIVERSITY 3130	2	8	21	1	1	33	33	66	25	31	26	51	133	199
KENTUCKY STATE COLLEGE 6113			1			1	4	5		4		9	13	18
UNIVERSITY OF KENTUCKY 6126	17	37	75	11	33	173	168	341	41	69	50	88	248	589
KENTUCKY WESLEYAN COLL 6114	3		1			4	1	5	4	3	3	11	21	26
KENYON COLLEGE 3131	9	6	24		2	41	13	54	7	12	42	4	65	119
KEUKA COLLEGE 2133			1			1	3	4		1	3	4	8	12
KING COLLEGE 6213		3	7			10	4	14	1	3	2	3	9	23
KINGS COLLEGE PA 2328			10			10	5	15						15
KINGS COLLEGE N Y 2054			2			2		2	1		2	1	4	6
KIRKSVILLE C OST & SURG 4317							1	1						1
KNOX COLLEGE 3347	8	10	39	1		58	19	77	10	30	21	24	85	162
KNOXVILLE COLLEGE 6214			1			1	3	4		3	2	10	15	19
KUTZTOWN STATE COLLEGE 2354		1	3		1	5	3	8	1		2	26	29	37
LADYCLIFF COLLEGE 2013									1		2	2	5	5
LAFAYETTE COLLEGE 2330	10	14	48	9	18	99	27	126	36	25	54	28	143	269
LA GRANGE COLLEGE 5827							1	1	1		2	2	5	6

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LAKE ERIE COLLEGE 3132							2	2	1		2	1	4	6
LAKE FOREST COLLEGE 3349	1	5	4			10	7	17	5	6	13	8	32	49
LAKELAND COLLEGE 3515							2	2	1	3	7	5	16	18
LAMAR STATE COLL OF TECH 7424		1		1	5	7		7			1		1	8
LAMBUTH COLLEGE 6215	1		3			4	3	7		1	1	3	5	12
LANDER COLLEGE 5719										1	1	3	5	5
LANE COLLEGE 6216							1	1			2	1	3	4
LANGSTON UNIVERSITY 7309			1			1	5	6	1	3	4	8	16	22
LASALLE COLLEGE 2329	1	8	21			30	6	36	7	6	11	8	32	68
LA SIERRA COLLEGE 9326		2				2	1	3	1			1	2	5
LA VERNE COLLEGE 9327	1		2			3	2	5	1	3	1	8	13	18
LAWRENCE COLLEGE 3510	1	6	39	5	2	53	28	81	19	29	31	47	126	207
LAWRENCE INST OF TECHNOL 3416	1	2	1		1	5		5						5
LEBANON VALLEY COLLEGE 2331	4	4	41	1	1	51	29	80	6	10	19	35	70	150
LEHIGH UNIVERSITY 2332	13	51	100	23	64	251	29	280	11	15	26	15	67	347
LELAND COLLEGE 7209							1	1	1			2	3	4
LEMOYNE COLLEGE 2136		1	4			5	2	7				1	1	8
LE MOYNE COLLEGE 6217											2	1	3	3
LENOIR RHYNE COLLEGE 5623	4		5			9	2	11	2	1	6	11	20	31
LEWIS & CLARK COLLEGE 9203		2	6		1	9	5	14	8	1	4	7	20	34
LEWIS COLLEGE 3351			1			1		1	2	1			3	4
LIMESTONE COLLEGE 5720									1			1	2	2
LINCOLN CHRISTIAN COLL 3397											3	1	4	4
LINCOLN MEMORIAL UNIV 6218		2	2			4	4	8	4	3	5	14	26	34
LINCOLN UNIVERSITY 2333	1	1	5			7	10	17	4	6	6	16	32	49
LINCOLN UNIVERSITY 4318			3	1		4	3	7	2	6	4	17	29	36
LINDENWOOD COL FOR WOMEN 4319			1			1	3	4		1	1	1	3	7
LINFIELD COLLEGE 9204	1	6	13		1	21	19	40	3	17	14	17	51	91
LITTLE ROCK UNIVERSITY 7114			1			1		1		1	1	1	3	4
LIVINGSTON STATE COLLEGE 6305										1		8	9	9
LIVINGSTONE COLLEGE 5624							3	3	1	4	1	3	9	12
LOCK HAVEN STATE COLLEGE 2355							1	1	2	2	1	30	35	36
LOMA LINDA UNIVERSITY 9312							2	2			1		1	3
LONG BEACH STATE COLLEGE 9328									2			4	6	6
LONG ISLAND UNIVERSITY 2138		2	20		1	23	49	72	46	9	7	40	102	174
LONGWOOD COLLEGE 5444							1	1			2	4	6	7
LORAS COLLEGE 4215	2	3	19			24	9	33	6	18	22	8	54	87

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LORETTO HEIGHTS COLLEGE 8408			1			1	1	2		3	2	1	6	8
L A COL OF OPTOMETRY 9331							1	1						1
LOS ANGELES PACIFIC COLL 9394											1		1	1
L A ST COL OF AP A & SC 9377	1					1		1	13	4	5	4	26	27
LOUISIANA COLLEGE 7206	3	1	4		1	9	4	13	4	5	10	8	27	40
LOUISIANA POLYT INST 7207	7	4	9		13	33	14	47	1	6	14	25	46	93
LA ST UNIV & AG & MECH C 7208	15	26	59	16	39	155	140	295	23	73	67	79	242	537
LOUISVILLE PRES THEO SEM 6116										1			1	1
UNIVERSITY OF LOUISVILLE 6125	6	12	44		17	79	17	96	20	17	32	14	83	179
STATE COLLEGE AT LOWELL 1432												8	8	8
LOWELL TECHNOLOG INST 1424			11			11		11		1			1	12
LOYOLA COLLEGE 5207		4	26		2	32	12	44	5	8	8	2	23	67
LOYOLA UNIVERSITY ILL 3354	10	7	38	1	2	58	29	87	20	35	58	26	139	226
LOYOLA UNIVERSITY LA 7210		9	22	1	1	33	10	43	4	8	16	5	33	76
LOYOLA UNIVERSITY OF L A 9332		1	3			4	5	9		11	4	1	16	25
LUTHER COLLEGE 4216	9	9	17	1		36	24	60	6	18	22	21	67	127
LUTHUR THEOLOGICAL SEMIN 4115											1	2	3	3
LUTHERAN THEOL SEM PHIL 2335										1	1		2	2
LYCOMING COLLEGE 2399							2	2	2	1	2	3	8	10
LYNCHBURG COLLEGE 5414	1	5	10			16	5	21	3	11	10	14	38	59
LYNDON TEACHERS COLLEGE 1304												2	2	2
MACALESTER COLLEGE 4116	3	3	18	2	1	27	20	47	9	13	24	12	58	105
MACMURRAY COLLEGE 3355			4			4	1	5	2	3	7	8	20	25
MACPHAIL COLL OF MUSIC 4117											3	3	6	6
MADISON COLLEGE VA 5415			1			1	2	3		3	5	5	13	16
MADISON COLLEGE TENN 6219			2			2	4	6		1		3	4	10
MADONNA COLLEGE 3438											1	2	3	3
UNIVERSITY OF MAINE 1111	7	18	34	3	11	73	121	194	13	42	24	38	117	311
MALONE COLLEGE 3114											1	1	2	2
MANCHESTER COLLEGE 3222	3	7	40			50	13	63	7	26	27	33	93	156
MANHATTAN COLLEGE 2140	4	10	27		14	55	15	70	4	21	36	28	89	159
MANHATTAN SCHOOL OF MUS 2015												1	1	1
MANHATTANVILLE CO SAC HT 2141							2	2	1	6	20	3	30	32
MANKATO STATE COLLEGE 4121	2	1	5			8	6	14	2	4	2	17	25	39
MANSFIELD STATE COLLEGE 2356			2			2	2	4		1	2	22	25	29
MARIAN COLLEGE IND 3223							1	1			2		2	3
MARIAN COLL FOND DU LAC 3542										1		1	2	2

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MARIETTA COLLEGE 3133	7	4	28	8		47	29	76	8	12	14	16	50	126
MARION COLLEGE 3224	1	2				3	4	7	1	4	5	10	20	27
MARIST COLLEGE 2142		1	2			3		3	1	1			2	5
MARLBORO COLLEGE 1311							2	2						2
MARQUETTE UNIVERSITY 3512	3	9	31		23	66	46	112	7	23	46	20	96	208
MARSHALL UNIVERSITY 5509	3	1	17	1	1	23	11	34	5	23	7	22	57	91
MARY BALDWIN COLLEGE 5417									2	1	1	2	6	6
MARY HARDIN BAYLOR COLL 7426							1	1		1			1	2
MARY IMMACULATE SEMINARY 2415											1		1	1
MARY MANSE COLLEGE 3134			1			1		1			1		1	2
MARY WASHINGTON C U VA 5418							5	5	2	3	1	2	8	13
MARYCREST COLLEGE 4231											1	1	2	2
MARYGROVE COLLEGE 3417	1		3			4	1	5	4	5	11	4	24	29
MARYKNOLL SEMINARY N Y 2016									1	2	4	2	9	9
MARYKNOLL SEMINARY ILL 3334			1			1		1		1			1	2
MARYLAND INST COL OF ART 5209												2	2	2
MARYLAND STATE COLLEGE 5233							4	4		1			1	5
UNIVERSITY OF MARYLAND 5226	10	16	105	1	31	163	247	410	33	35	27	44	139	549
MARYLHURST COLLEGE 9205							2	2	1	4	1	2	8	10
MARYMOUNT COLLEGE N Y 2143							2	2	1	3	7	1	12	14
MARYMOUNT COLLEGE KAN 4715	2					2		2	1	3	5		9	11
MARYVILLE COLLEGE TENN 6221	6	1	16			23	20	43	7	21	38	27	93	136
MARYVILLE COL OF SAC HT 4353										3	2	3	8	8
MARYWOOD COLLEGE 2337			2			2	2	4	3	1	3	6	13	17
MASSACHUSETTS COL OF ART 1437											2	7	9	9
MASS COLL OF OPTOMETRY 1438							1	1						1
MASS COLLEGE OF PHARMACY 1426			20			20	35	55						55
MASS INST OF TECHNOLOGY 1427	124	342	324	73	505	1368	104	1472	14	24	10	10	58	1530
MASS MARITIME ACADEMY 1428										1			1	1
UNIV OF MASSACHUSETTS 1459	5	9	93	2	6	115	328	443	32	31	29	26	118	561
MAYVILLE ST TEACHERS COL 4404												13	13	13
MCCORMICK THEOL SEMINARY 3357												2	2	2
MCKENDREE COLLEGE 3358	3	1	5			9	8	17		7	5	2	14	31
MCMURRY COLLEGE 7427	1		1			2		2		1	3	6	10	12
MCNEESE STATE COLLEGE 7220			1			1	1	2						2
MCPHERSON COLLEGE 4716		3	9			12	9	21	3	10	4	30	47	68
MEADVILLE THEOL SCHOOL 3359										1	1		2	2

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	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
MEDICAL C OF SO CAROLINA 5722							3	3						3
MEDICAL COL OF VIRGINIA 5419			4			4	7	11				1	1	12
MEHARRY MEDICAL COLLEGE 6222							1	1						1
MEMPHIS STATE UNIVERSITY 6223	2		10			12	12	24	3	9	10	19	41	65
MERCER UNIVERSITY 5828		2	9			11	9	20	6	10	16	26	58	78
MERCY COLLEGE 3418							1	1			1		1	2
MERCYHURST COLLEGE 2338	1		2			3		3	1		3	2	6	9
MEREDITH COLLEGE 5627			2			2	2	4	1	1	9	1	12	16
MERRIMACK COLLEGE 1469			1			1	3	4		2	1		3	7
MIAMI UNIVERSITY 3135	11	60	64	24	8	167	101	268	40	93	77	54	264	532
UNIVERSITY OF MIAMI 5911	6	2	28		2	38	43	81	34	21	28	17	100	181
MICH COLL OF MIN & TECH 3420	1	3	14	12	33	63	8	71		1	1		2	73
MICH ST UN OF AG & AP SC 3421	13	23	96	8	44	184	427	611	35	84	47	96	262	873
UNIVERSITY OF MICHIGAN 3430	83	180	294	80	317	954	413	1367	203	356	366	206	1131	2498
MIDDLEBURY COLLEGE 1306	7	8	43	8	2	68	31	99	6	37	35	29	107	206
MIDDLE TENN ST COLLEGE 6224			11			11	4	15	1	9	4	34	48	63
MIDLAND COLLEGE 4609	3	1	2	1		7	2	9	2	8	12	22	44	53
MIDWESTERN UNIVERSITY 7471			3			3	3	6		1	2	2	5	11
MILES COLLEGE 6316							1	1		2		2	4	5
MILLERSVILLE STATE COLL 2357							1	1	2	5	3	35	45	46
MILLIGAN COLLEGE 6225							1	1	1	5		8	14	15
MILLIKIN UNIVERSITY 3345	2	2	25			29	18	47	3	9	15	13	40	87
MILLS COLLEGE 9334			2			2	6	8	7	4	9	10	30	38
MILLS COLL OF EDUCATION 2144												1	1	1
MILLSAPS COLLEGE 6408	4	3	12	1		20	6	26	10	18	20	17	65	91
MILTON COLLEGE 3513		3	3			6	11	17		6	4	3	13	30
MILWAUKEE DOWNER COLLEGE 3514			2	1		3	4	7		2	5	1	8	15
MILWAUKEE SCHOOL OF ENG 3543					7	7		7						7
UNIVERSITY OF MINNESOTA 4133	70	91	269	61	186	677	700	1377	247	319	310	318	1194	2571
MINOT ST TEACHERS COLL 4405							2	2	1	2		11	14	16
MISSISSIPPI COLLEGE 6409	3	10	32		1	46	12	58	3	18	17	15	53	111
MISSISSIPPI INDUST COLL 6410			1			1		1			1	2	3	4
MISSISSIPPI SOUTHERN COL 6411	5		4			9	2	11	2	8	5	31	46	57
MISS ST COLL FOR WOMEN 6413							6	6	2	2	7	5	16	22
MISSISSIPPI ST UNIV 6412	5	4	35	7	17	68	126	194	1	23	7	27	58	252
UNIV OF MISSISSIPPI 6417	11	12	16	1	4	44	15	59	15	36	26	16	93	152
MISSOURI SCH MINES & MET 4345	1	14	15	16	49	95	5	100						100

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UNIVERSITY OF MISSOURI 4338	21	35	106	31	48	241	296	537	59	175	143	201	578	1115
MISSOURI VALLEY COLLEGE 4341	3	1	10		3	17	2	19	1	3	5	18	27	46
MONMOUTH COLLEGE N J 2238										1			1	1
MONMOUTH COLLEGE ILL 3360	2	2	60	3	3	70	20	90	3	11	19	17	50	140
MONTANA SCHOOL OF MINES 8105	1	1	1	9	13	25		25				1	1	26
MONTANA STATE COLLEGE 8106	2	26	67	4	32	131	104	235		12	4	18	34	269
MONTANA STATE UNIVERSITY 8108	7	15	49	21	3	95	79	174	17	32	31	25	105	279
MONTCLAIR STATE COLLEGE 2217	1		4		1	6	9	15		12	14	63	89	104
MOORHEAD STATE COLLEGE 4122							7	7	2	5	2	28	37	44
MORAVIAN COLLEGE 2341		1	3			4	11	15	1	5	9	5	20	35
MOREHEAD STATE COLLEGE 6117		1	2			3	2	5		1	4	5	10	15
MOREHOUSE COLLEGE 5830	1		5			6	3	9	2	13	6	5	26	35
MORGAN STATE COLLEGE 5214			2			2	3	5	3	4	2	12	21	26
MORNINGSIDE COLLEGE 4217	3	8	9		1	21	10	31	4	18	20	25	67	98
MORRIS BROWN COLLEGE 5831							2	2			2	3	5	7
MORRIS HARVEY COLLEGE 5510			9			9	9	18	2	6		3	11	29
MOUNT ANGEL SEMINARY 9207										1	1	1	3	3
MT HOLYOKE COLLEGE 1439	4	4	61	2		71	106	177	20	55	79	18	172	349
MOUNT MARTY COLLEGE 4514							1	1		1	2	1	4	5
MOUNT MARY COLLEGE 3516	1		1			2	3	5		1	7	2	10	15
MOUNT MERCY COLLEGE PA 2343			1			1	4	5	1		3	1	5	10
MOUNT ST AGNES COLLEGE 5215			1			1	1	2			1	1	2	4
MOUNT ST ALPHONSUS SEMIN 2139										1			1	1
CC MT ST JOSEPH ON OHIO 3116			1			1	2	3	2		2	1	5	8
MT ST JOSEPH TEACH COLL 2145	1					1		1				5	5	6
MOUNT ST MARY COLLEGE 1203										2	1		3	3
MOUNT ST MARYS COLL MC 5216		2	5			7	8	15	2	2	12	5	21	36
MOUNT ST MARYS COLL CAL 9335	2		2			4	2	6	1	3	3	1	8	14
MOUNT ST SCHOLASTICA COL 4717							3	3		3	8	3	14	17
COLL OF MT ST VINCENT 2110			4			4	4	8	5	7	21	13	46	54
MOUNT UNION COLLEGE 3137	2	3	38	5	2	50	16	66	3	6	18	25	52	118
MUHLENBERG COLLEGE 2344	4	11	25	4		44	26	70	8	20	48	23	99	169
MUNDELEIN COLLEGE 3363		1	2			3	6	9	1	3	4	2	10	19
MURRAY STATE COLLEGE 6118	3	1	9			13	15	28		4	16	31	51	79
MUSKINGUM COLLEGE 3138		8	27	3	2	40	13	53	14	16	27	39	96	149
NASHOTAH HOUSE 3518											1		1	1
NATIONAL COLLEGE 4324											1		1	1

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NATIONAL COLL OF EDUC 3368												5	5	5
NAZARETH COLLEGE N Y 2166	1					1	1	2			6	3	9	11
NAZARETH COLLEGE MICH 3423	1					1		1			3		3	4
NAZARETH COLLEGE KY 6119			1			1		1	1	3	5	1	10	11
NEBRASKA S T C CHADRON 4612		1	13			14	6	20	1	6	1	15	23	43
NEBRASKA S T C KEARNEY 4613	2		6			8	13	21	1	3	8	52	64	85
NEBRASKA S T C PERU 4616	2	1	4		1	8	17	25	2	9	4	34	49	74
NEBRASKA S T C WAYNE 4614		2	9		1	12	2	14	2	11	4	41	58	72
UNIVERSITY OF NEBRASKA 4618	18	34	135	19	32	238	329	567	73	161	114	181	529	1096
NEBRASKA WESLEYAN UNIV 4615	4	15	15			34	31	65	15	22	18	48	103	168
NER ISRAEL RABBINICAL CO 5217										1			1	1
UNIVERSITY OF NEVADA 8801	2	9	14	7	4	36	13	49	6	17	8	13	44	93
NEW BEDFORD INST OF TECH 1472			3			3		3						3
NEW BRUNSWICK THEOL SEM 2211		1				1		1						1
NEW ENGLAND COLLEGE 1208			1			1		1						1
NEW ENGLAND COLL OF PHAR 1473			4			4	6	10						10
NEW ENGLAND CONS OF MUS 1442											3	4	7	7
UNIV OF NEW HAMPSHIRE 1207	4	13	93	14	13	137	123	260	25	31	18	53	127	387
N MEXICO HIGHLANDS UNIV 8504							3	3	2	2	1	7	12	15
N MEX INST OF MIN & TECH 8507		1	1	4	1	7		7						7
NEW MEXICO STATE UNIV 8503	2	2	4	1	8	17	47	64	3	5	1	5	14	78
UNIVERSITY OF NEW MEXICO 8508	8	8	20	10	16	62	24	86	16	58	36	25	135	221
NEW MEXICO WESTERN COLL 8506			1	1		2	2	4			4	10	14	18
COLLEGE AT NEW PALTZ 2152												13	13	13
COLLEGE OF NEW ROCHELLE 2111			3			3	7	10	4	8	17	9	38	48
NEW SCH FOR SOC RESEARCH 2163									11	11	4	2	28	28
NEW YORK LAW SCHOOL 2135										1	1		2	2
NEW YORK MEDICAL COLLEGE 2146							1	1			1		1	2
NEW YORK UNIVERSITY 2165	81	71	237	31	92	512	243	755	326	243	323	512	1404	2159
NEWARK COLL ENGINEERING 2218	1	4	8		25	38		38			1	2	3	41
NEWARK STATE COLLEGE 2214			1			1		1			2	22	24	25
NEWBERRY COLLEGE 5724		1	7			8	1	9	1	2	2	8	13	22
NEWCOMB COLLEGE 7221	1	1	5			7	2	9	6	1	11	5	23	32
NEWTON CO OF THE SACR HT 1444							1	1						1
NIAGARA UNIVERSITY 2167	1		16	1		18	5	23	1	7	12	8	28	51
STATE COLLEGE AT N ADAMS 1433										1		4	5	5

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UNIV OF NORTH CAROLINA 5640	25	44	126	20	60	275	192	467	38	157	177	85	457	924
N C CCLLEGE AT DURHAM 5630			5			5	7	12	1	3	2	7	13	25
NCRTH CENTRAL COLLEGE 3365	3	13	14		1	31	35	66	8	17	33	19	77	143
NCRTH DAKOTA ST UNIV 4402	3	2	40	2	13	60	86	146	5	15	5	18	43	189
UNIV CF NORTH DAKOTA 4410	1	12	34	3	9	59	24	83	19	40	23	36	118	201
NCRTH GEORGIA COLLEGE 5832		2	4			6	3	9	1	3		1	5	14
NCRTH PARK COL & THEOL S 3392			4			4	2	6	3				3	9
N TEXAS STATE UNIVERSITY 7429	13	11	44		3	71	41	112	12	40	36	163	251	363
NCRTHEAST LA STATE COLL 7222										1			1	1
NE MISSOURI ST TEACH COL 4322	6	7	13			26	15	41	2	27	16	70	115	156
NCRTHEASTERN UNIVERSITY 1440	5	8	45		23	81	20	101	19	16	5	13	53	154
NORTHEASTERN ST COLLEGE 7312	1		1			2	2	4	1	3	3	30	37	41
NORTHERN BAPT THEOL SEM 3364										3	4	1	8	8
NCRTHERN ILLINOIS UNIV 3367	2		5		2	9	25	34	5	11	8	56	80	114
NCRTHERN MICHIGAN COLL 3422	1	1	3	1	1	7	11	18	4	8	4	31	47	65
NORTHERN STATE TEACH COL 4506			3		1	4	5	9	1	4	3	28	36	45
NORTHLAND COLLEGE 3519			2			2	6	8		2	1	6	9	17
NCRTHWEST CHRISTIAN CCLL 9224											4		4	4
NW MISSOURI ST COLLEGE 4323	2	4	6	1		13	4	17	1	8	8	38	55	72
NCRTHWEST NAZARENE COLL 8204							1	1			3	9	12	13
NCRTHWESTERN COLLEGE WIS 3517							2	2	1	3	11	4	19	21
NCRTHWESTERN COLL MINN 4126											4		4	4
NORTHWESTERN ST COLLEGE 7313	1		3			4	3	7		5	8	20	33	40
NWESTERN ST COLL OF LA 7212	1	1	5			7	9	16		8	11	32	51	67
NORTHWESTERN UNIV 3369	39	52	139	24	81	335	136	471	123	186	250	128	687	1158
NCRWICH UNIVERSITY 1305			6		2	8	2	10		2	1		3	13
NCTRE DAME COLLEGE OHIO 3139		1	1			2	2	4			1	1	2	6
CCLLEGE OF NOTRE DAME 9313			1			1		1		1			1	2
NCTRE DAME CO OF STAT IS 2168							2	2	1	3	2		6	8
COLL CF NOTRE DAME OF MD 5202	1		2			3	4	7		5	4	2	11	18
UNIVERSITY OF NOTRE DAME 3235	15	27	131	8	54	235	35	270	14	59	86	37	196	466
NYACK MISSIONARY COLLEGE 2017												1	1	1
OAKLAND CITY COLLEGE 3225	4	2	1			7	1	8		4	4	14	22	30
OAKWOCD COLLEGE 6317			1			1	1	2						2
OBERLIN COLLEGE 3140	27	101	184	24	5	341	152	493	90	185	252	124	651	1144
OCCIDENTAL COLLEGE 9336	4	8	15	10	2	39	17	56	20	36	37	47	140	196
OGLETHORPE UNIVERSITY 5833			1			1	1	2	1	2	3	4	10	12
OHIO NORTHERN UNIVERSITY 3141	1	1	18	2	4	26	11	37	2	8	8	31	49	86

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OHIO STATE UNIVERSITY 3142	27	97	259	25	171	579	523	1102	161	263	191	294	909	2011
OHIO UNIVERSITY 3143	11	12	60	6	9	98	54	152	53	49	39	97	238	390
OHIO WESLEYAN UNIVERSITY 3144	4	17	54	13	6	94	43	137	31	78	95	76	280	417
OKLAHOMA BAPTIST UNIV 7315	2	6	3			11	8	19		5	5	10	20	39
OKLAHOMA CITY UNIVERSITY 7317		1	5			6	5	11		5	11	9	25	36
OKLAHOMA COLL FOR WOMEN 7318			1			1	2	3		2	4	14	20	23
OKLA ST U OF AG & AP SC 7314	14	12	30	4	34	94	231	325	21	49	24	94	188	513
UNIVERSITY OF OKLAHOMA 7325	22	34	71	30	47	204	87	291	46	100	90	98	334	625
OLIVET COLLEGE 3424	2	6	9			17	7	24	3	7	4	8	22	46
OLIVET NAZARENE COLLEGE 3370	1		3	1		5	1	6	2	1	8	4	15	21
UNIVERSITY OF OMAHA 4610	3	1	17	1	1	23	6	29	13	7	7	19	46	75
COLLEGE AT ONEONTA 2153											1	9	10	10
OREGON COLL OF EDUCATION 9212							1	1			1	6	7	8
OREGON STATE UNIVERSITY 9211	11	22	93	15	42	183	225	408	7	23	18	62	110	518
UNIVERSITY OF OREGON 9217	13	17	36	22	1	89	47	136	37	85	70	122	314	450
COL OF OSTEOP MED & SURG 4207							1	1				1	1	2
COLLEGE AT OSWEGO 2154									2	2		31	35	35
OTTAWA UNIVERSITY 4719	3	2	11			16	12	28	3	5	7	10	25	53
OTTERBEIN COLLEGE 3145	2	2	17	1	1	23	23	46	5	13	19	25	62	108
OUACHITA BAPTIST COLLEGE 7115			7			7	6	13		8	6	14	28	41
OUR LADY OF CINC COLLEGE 3146												2	2	2
CC OUR LADY OF THE ELMS 1414							1	1			2		2	3
OUR LADY OF THE LAKE COL 7430	1		1			2	1	3		3	5	3	11	14
COLLEGE OF THE OZARKS 7109			2			2	7	9		3	3	7	13	22
PACE COLLEGE 2169										1			1	1
UNIV OF THE PACIFIC 9315			12			12	2	14	4	17	13	25	59	73
PACIFIC LUTHERAN UNIV 9107	1	3	3			7	4	11	2		3	2	7	18
PACIFIC UNION COLLEGE 9337	2	3	5	1	1	12	11	23	1	11	15	13	40	63
PACIFIC UNIVERSITY 9214	3		6		1	10	3	13	1	6	4	19	30	43
PAINE COLLEGE 5834							2	2	1	4		3	8	10
PAN AMERICAN COLLEGE 7472							1	1						1
PANHANDLE AGRIC & MECH C 7320		1	4			5	2	7			2	5	7	14
PARK COLLEGE 4325	6	23	14	1		44	17	61	8	21	39	30	98	159
PARKS COL OF AERON TECH 3372										2			2	2
PARSONS COLLEGE 4219		1	4			5	5	10	4	6	4	13	27	37
PASADENA COLLEGE 9340			1			1	1	2	3	3	11	2	19	21
PATERSON STATE COLLEGE 2215									1		1	7	9	9

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PEABODY INST OF BALTIM 5218											4	2	6	6
PEMBROKE COLLEGE 1512	1	1	1			3	1	4	4	2	1	1	8	12
PENNSYLVANIA MILITARY CO 2347			5			5	1	6						6
PENNA ST COLL OF OPTOMET 2361							1	1						1
PENNA STATE UNIV 2362	17	53	258	41	143	512	446	958	95	125	82	179	481	1439
UNIV OF PENNSYLVANIA 2384	44	73	199	5	61	382	176	558	97	258	289	150	794	1352
PEPPERDINE COLLEGE 9319	1					1	1	2	4	6	10	14	34	36
PHIL COLL OF PHARM & SCI 2365		1	43		1	45	80	125			1	2	3	128
PHIL MUSEUM COLL OF ART 2405												1	1	1
PHIL MUSICAL ACADEMY 2336			1			1		1				1	1	2
PHIL COLL TEXTILES & SCI 2367			1			1		1						1
PHILANDER SMITH COLLEGE 7116							1	1	1	1		1	3	4
PHILLIPS UNIVERSITY 7321	1	7	2	1	1	12	10	22	3	7	11	22	43	65
PIEDMONT COLLEGE 5835							2	2	1	2	2	7	12	14
UNIVERSITY OF PITTSBURGH 2385	24	28	119	7	40	218	174	392	84	119	123	187	513	905
COLLEGE AT PLATTSBURG 2155							1	1	1		1	9	11	12
PLYMOUTH TEACHERS COLL 1204									1			2	3	3
POLYTEC INST OF BROOKLYN 2171	7	32	145	1	110	295	11	306	3	1		8	12	318
POMONA COLLEGE 9341	11	37	52	23	9	132	62	194	25	72	53	53	203	397
UNIVERSITY OF PORTLAND 9218		2	15		1	18	7	25	4	3	3	4	14	39
COLLEGE AT POTSDAM 2156							1	1			7	13	20	21
PRAIRIE VIEW AG & MECH C 7433	1					1	12	13	1	3	1	12	17	30
PRATT INSTITUTE 2172	1		1		10	12	1	13			1	6	7	20
PRESBYTERIAN COLLEGE 5725	1	3	5			9	2	11	3	3	11	5	22	33
PRINCETON THEOL SEMINARY 2220											3		3	3
PRINCETON UNIVERSITY 2221	37	102	176	63	59	437	66	503	57	229	324	42	652	1155
PRINCIPIA COLLEGE 3374		4	3	1	2	10	6	16		5	7	4	16	32
PROT EPIS THEO SEM IN VA 5420											1		1	1
PROVIDENCE COLLEGE 1504	3	7	20		1	31	16	47	4	6	18	10	38	85
UNIV OF PUERTO RICO 9810	6	5	12	1	7	31	65	96	8	26	16	41	91	187
UNIV OF PUGET SOUND 9102	4	8	13	2	1	28	10	38	8	13	18	4	43	81
PURDUE UNIVERSITY 3226	28	68	170	2	320	588	326	914	71	79	25	58	233	1147
QUEENS COLLEGE N Y 2173	13	22	67	2	2	106	35	141	72	36	53	20	181	322
QUEENS COLLEGE N C 5635							1	1	1	1	1		3	4
QUINCY COLLEGE 3375			1			1	2	3		6	2	7	15	18
RADCLIFFE COLLEGE 1448	6	6	18	1		31	30	61	24	73	69	21	187	248
RADFORD COL VA POLY INST 5421							3	3		1	1	4	6	9

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	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
RANDOLPH MACON COLLEGE 5423	4	11	29			44	6	50	1	16	23	10	50	100
RANDOLPH MACON WOMANS CO 5422	5		9			14	12	26	8	9	18	6	41	67
UNIVERSITY OF REDLANDS 9357	1	8	13	4	1	27	11	38	18	27	44	44	133	171
REED COLLEGE 9215	24	55	78	1	2	160	49	209	34	83	33	23	173	382
REGIS COLLEGE MASS 1449	2					2	1	3	1	3	3	3	10	13
REGIS COLLEGE COLORADO 8409	1		17			18	5	23	2	2	4	4	12	35
RENSSELAER POLYTECH INST 2174	12	79	115	1	188	395	24	419	1	3	4	8	16	435
RHODE ISLAND COLLEGE 1505			1			1	2	3		8	3	13	24	27
RHODE IS SCH OF DESIGN 1507			1			1	1	2			2	2	4	6
UNIV OF RHODE ISLAND 1508	3	2	33		14	52	103	155	4	6	9	14	33	188
RICE UNIVERSITY 7434	27	77	86	5	44	239	33	272	2	30	36	19	87	359
UNIVERSITY OF RICHMOND 5432	7	16	34	1	3	61	29	90	24	54	39	17	134	224
RIDER COLLEGE 2222										2		4	6	6
RIO GRANDE COLLEGE 3147									3		2	6	11	11
RIPON COLLEGE 3521	1	23	14		4	42	15	57	5	11	7	13	36	93
RIVIER COLLEGE 1205							1	1	1		2	1	4	5
ROANOKE COLLEGE 5424	2	5	6		1	14	6	20		6	18	7	31	51
ROBERTS WESLEYAN COLL 2019										1			1	1
ROCHESTER INST OF TECH 2051			4		1	5		5						5
UNIVERSITY OF ROCHESTER 2194	30	61	108	23	39	261	90	351	58	63	129	60	310	661
ROCKFORD COLLEGE 3376	1		1			2	7	9	1	9	9	6	25	34
ROCKHURST COLLEGE 4326	4	9	8		1	22	3	25		4	7		11	36
ROCKY MOUNTAIN COLLEGE 8110	2	1				3	1	4		1	3	9	13	17
ROLLINS COLLEGE 5910	1		11			12	12	24	5	11	12	2	30	54
ROOSEVELT UNIVERSITY 3377	4	5	17			26	24	50	38	23	24	9	94	144
ROSARY COLLEGE 3378	1		7			8	1	9	1	5	6	3	15	24
ROSE POLYTECHNIC INST 3227	2	3	4		25	34		34						34
ROSEMONT COLLEGE 2371			4			4		4		2	8	1	11	15
RUSSELL SAGE COLLEGE 2176			1			1	2	3		2	3	7	12	15
RUST COLLEGE 6415										1		2	3	3
RUTGERS THE STATE UNIV 2223	13	39	169	18	45	284	344	628	59	102	71	102	334	962
SACRAMENTO STATE COLLEGE 9343			2			2		2		1	3	2	6	8
SACRED HEART COLLEGE 4732										1	1		2	2
SACRED HEART SEMINARY 3425											4	2	6	6
ST AMBROSE COLLEGE 4221	2	1	19		1	23	15	38		11	14	3	28	66
ST ANDREWS PRESBY COLL 5616							3	3		1	1	5	7	10
ST ANSELMS COLLEGE 1206			7			7	10	17		2	4	2	8	25

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ST AUGUSTINES COLLEGE 5638												2	2	2
CCLLEGE OF ST BENEDICT 4105		1	1			2	2	4	1	5	6	1	13	17
ST BENEDICTS COLLEGE 4721	3	2	11			16	7	23	2	6	10	3	21	44
ST BERNARD COLLEGE 6320							1	1						1
ST BERNARDINE OF SIENA C 2179		2	5			7	8	15	2	1	1	5	9	24
ST BERNARCS SEM & COLL 2180									2	2	5	3	12	12
ST BONAVENTURE UNIV 2181	1	2	9			12	14	26	2	5	24	19	50	76
CCLLEGE OF ST CATHERINE 4106	1		1			2	3	5	6	3	13	4	26	31
ST CHARLES BORROMEO SEM 2373										1	16	1	18	18
ST CHARLES SEMINARY 3150									1	1	2		4	4
ST CLOUD STATE COLLEGE 4123		3	1	1		5	9	14	4	5	2	47	58	72
ST EDWARDS UNIVERSITY 7464	1	1	2			4	1	5			2	1	3	8
COLLEGE OF ST ELIZABETH 2206	1		1			2	5	7	5	7	11	7	30	37
ST FICELIS COLLEGE & SEM 2406											1		1	1
ST FRANCIS COLLEGE N Y 2182			9			9	13	22		9	6	6	21	43
ST FRANCIS COLLEGE PA 2374		1	5			6	4	10		2	4	3	9	19
ST FRANCIS COLLEGE INC 3228												2	2	2
ST FRANCIS COLLEGE WISC 3524											3		3	3
COLLEGE OF ST FRANCIS 3324			2			2		2			3	1	4	6
ST FRANCIS SEMINARY 3538							3	3	1	6	3	1	11	14
ST JOHN COL OF CLEVELAND 3151							2	2	1	1	1	2	5	7
ST JOHN FISHER COLL INC 2117		1	4			5		5						5
ST JOHNS COLLEGE MD 5221	2	4	9	3	3	21	7	28	3	9	13	5	30	58
ST JOHNS COLLEGE CAL 9352												1	1	1
ST JOHNS SEMINARY 1453										2	6		8	8
ST JOHNS UNIVERSITY N Y 2183	5	4	28		3	40	37	77	14	40	56	55	165	242
ST JOHNS UNIVERSITY MINN 4127	3	8	24	1	3	39	8	47	2	16	13	10	41	88
ST JOSEPH COLLEGE CONN 1610			1			1		1		2	2	2	6	7
ST JOSEPH COLLEGE MC 5222											3	7	10	10
CCL OF ST JOS ON RIO GR 8509							1	1						1
ST JOSEPHS COLLEGE ME 1110											1	1	2	2
ST JOSEPHS COLLEGE PA 2375	1	6	22			29	11	40	3	4	6	3	16	56
ST JOSEPHS COLLEGE INC 3229	1		1	4		6	1	7		3	3	1	7	14
ST JOSEPHS COL FOR WOMEN 2184							1	1	2	6	10	8	26	27
ST JOSEPHS SEM & COLLEGE 2185				1		1	1	2	1	10	31	8	50	52
ST LAWRENCE UNIVERSITY 2186	2	7	21	6	1	37	16	53	10	12	8	29	59	112
ST LOUIS C PHAR & AL SCI 4330			5			5	7	12						12

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ST LOUIS UNIVERSITY 4332	13	19	52	14	3	101	37	138	18	80	97	30	225	363
ST MARTINS COLLEGE 9112			3		1	4	1	5		3	1		4	9
ST MARY COLLEGE 4724	1		4			5	1	6		2	5	4	11	17
COLLEGE OF ST MARY 4601												1	1	1
ST MARY OF THE LAKE SEM 3385	1	1				2	1	3		3	6	6	15	18
COL OF ST MARY OF SPRING 3152							3	3	2	4	6	1	13	16
CC OF ST MARY OF WASATCH 8703											2	1	3	3
ST MARY OF THE WOODS COL 3231							1	1		1	13	2	16	17
ST MARYS COLLEGE INC 3230			3			3		3		3	21	2	26	29
ST MARYS COLLEGE MICH 3427			1			1		1		2			2	3
ST MARYS COLLEGE MINN 4128	1	1	13			15	14	29	2		6	4	12	41
ST MARYS COLLEGE KAN 4733										2	2		4	4
ST MARYS COLLEGE KY 6121									1	1	1	1	4	4
ST MARYS COLL OF CALIF 9353		2	6			8	1	9	1	3	9	8	21	30
ST MARYS DOMINICAN COLL 7204	1					1	1	2	2	1	1		4	6
ST MARYS SEMINARY CONN 1627									1	1	5	1	8	8
ST MARYS SEMINARY ILL 3356		1				1		1	1		1	1	3	4
ST MARYS SEMINARY & UNIV 5223									2	8	34	10	54	54
ST MARYS UNIV OF SAN ANT 7446	1	6	7			14		14		7	5	1	13	27
ST MEINRAD SEMINARY 3232			1			1	1	2		3	12	3	18	20
ST MICHAELS COLLEGE VT 1307	1		8			9	6	15		5	5		10	25
ST NORBERT COLLEGE 3525	1	1	4	1		7	10	17		8	9	4	21	38
ST OLAF COLLEGE 4129	6	24	84			114	46	160	9	31	55	46	141	301
ST PATRICKS SEMINARY 9354									1	8	3	4	16	16
ST PAUL SEMINARY 4139									1	4	1		6	6
ST PAULS COLLEGE 5325										1	1		2	2
ST PETERS COLLEGE 2225		4	14			18	17	35	5	6	6	5	22	57
ST PROCOPIUS COLLEGE 3386		11	7			18	3	21		2	3	1	6	27
COLLEGE OF SAINT ROSE 2113			2			2	2	4	2	4	7	1	14	18
COLL OF ST SCHOLASTICA 4107							1	1	1	1	2	3	7	8
COLLEGE OF ST TERESA 4108	2	2				4	3	7	2	6	8	4	20	27
COLLEGE OF ST TERESA MO 4304												1	1	1
COLLEGE OF ST THOMAS 4109	6	3	43		2	54	20	74	7	6	9	8	30	104
UNIVERSITY OF ST THOMAS 7474							1	1						1
ST THOMAS SEMINARY 8418											1	2	3	3
ST VINCENT COLLEGE 2376		2	23			25	9	34	3	8	14	10	35	69
ST XAVIER COLLEGE 3384	3		2			5	4	9	2	3	5	4	14	23

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SALEM COLLEGE W VA 5511			4		1	5	6	11		2	3	4	9	20
SALEM COLLEGE N C 5636			2			2		2	1		6		7	9
STATE TEACHERS COLLEGE 5212												3	3	3
STATE COLLEGE AT SALEM 1434									1	1	1	19	22	22
SAM HOUSTON ST TEACH COL 7442	3		2			5	11	16	2	9	6	29	46	62
SAN DIEGO COL FOR WOMEN 9388											1		1	1
SAN DIEGO STATE COLLEGE 9344	1	3	15	4	3	26	37	63	22	26	24	45	117	180
SAN FRANCISCO COL FOR WO 9345							3	3		5	13	4	22	25
SAN FRANCISCO STATE COLL 9346			3			3	7	10	5	15	9	66	95	105
SAN FRANCISCO THEOL SEM 9347											1		1	1
UNIV OF SAN FRANCISCO 9359		3	11			14	13	27		9	4	9	22	49
SAN JOSE STATE COLLEGE 9348	7	3	33	2	3	48	44	92	16	27	20	106	169	261
SAN LUIS REY COLLEGE 9349									1	1			2	2
UNIV OF SANTA CLARA 9360		1	9		6	16	6	22		2	1	2	5	27
SARAH LAWRENCE COLLEGE 2177			1			1	3	4	2	4	2	2	10	14
SAVANNAH STATE COLLEGE 5848			1			1	1	2		3	3	4	10	12
SCARRITT COLL FOR CHRIST 6231										1	1	1	3	3
SCH OF ART INST OF CHIC 3379					1	1		1		1	7	1	9	10
UNIVERSITY OF SCRANTON 2386		17	20			37	35	72	6	8	14	8	36	108
SCRIPPS COLLEGE 9350							2	2	2	1	2		5	7
SEABURY WESTERN THEO SEM 3380									1		1		2	2
SEATTLE PACIFIC COLLEGE 9109		3	2			5	4	9	3	5	10	14	32	41
SEATTLE UNIVERSITY 9108	3	2	6		1	12	1	13	1	7	5	1	14	27
SETON HALL UNIVERSITY 2224			11			11	20	31	6	13	17	26	62	93
SETON HILL COLLEGE 2372			3			3	11	14	5	3	7		15	29
SHAW UNIVERSITY 5637							2	2	1	5	5	3	14	16
SHELTON COLLEGE 2236									1				1	1
SHENANDOAH CONS OF MUSIC 5426											1	2	3	3
SHEPHERD COLLEGE 5512			1			1	1	2		1	1	6	8	10
SHERWOOD MUSIC SCHOOL 3381							1	1			1		1	2
SHIMER COLLEGE 3312			1			1		1						1
SHIPPENSBURG STATE COLL 2358							2	2	1	4	1	33	39	41
SHORTER COLLEGE 5839							1	1			3	2	5	6
SIENA COLLEGE 6232							1	1		2		1	3	4
SIENA HEIGHTS COLLEGE 3426	2		3			5	1	6		3	8	8	19	25
SIMMONS COLLEGE 1450			16			16	16	32	3	5	6	10	24	56
SIMPSON COLLEGE 4220	5	4	8	2	2	21	20	41	4	16	18	20	58	99

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SIOUX FALLS COLLEGE 4510	1		4			5	9	14		6	9	5	20	34
SKIDMORE COLLEGE 2178			1			1	1	2	2	1	3		6	8
SLIPPERY ROCK STATE COLL 2359							12	12	2	5	1	33	41	53
SMITH COLLEGE 1451	4	6	15	7		32	62	94	41	68	88	24	221	315
UNIVERSITY OF THE SOUTH 6241	3	6	18			27	7	34		16	28	2	46	80
SOUTH CAROLINA STATE COL 5726			1			1	3	4		2	2	15	19	23
UNIV OF SOUTH CAROLINA 5727	11	9	38	3	14	75	24	99	18	31	40	22	111	210
S D SCH OF MINES & TECH 4507	1	12	27	9	22	71	1	72	1			1	2	74
S D ST CO OF AG & MECH A 4508	1	10	21	1	11	44	119	163	2	18	4	13	37	200
STATE UNIV OF S DAKOTA 4511	4	8	33	4	3	52	25	77	10	22	26	20	78	155
SE MISSOURI STATE COLL 4327	1	9	28		1	39	12	51	5	12	13	67	97	148
SOUTHEASTERN LA COLLEGE 7213	2		7			9	9	18		2	3	7	12	30
SOUTHEASTERN ST COLLEGE 7322	1		3	1	1	6	6	12	1	6	5	42	54	66
SOUTHEASTERN UNIVERSITY 5314			1			1	1	2				1	1	3
SOUTHERN BAPTIST THEOL S 6120										1	2		3	3
SOUTHERN CALIFORNIA COLL 9380											2		2	2
UNIV OF SOUTHERN CALIF 9358	11	9	24	13	21	78	73	151	77	110	107	131	425	576
SOUTHERN CONN STATE COLL 1609									1		1	11	13	13
SOUTHERN ILLINOIS UNIV 3383	5	3	44	1	1	54	33	87	16	50	22	109	197	284
SOUTHERN METHODIST UNIV 7436	14	13	30	18	13	88	29	117	33	42	55	39	169	286
SOUTHERN MISSIONARY COLL 6229			1			1	1	2						2
SOUTHERN OREGON COLLEGE 9216												6	6	6
SOUTHERN STATE COLLEGE 7121			1			1		1				1	1	2
SOUTHERN STATE TEACH COL 4509												6	6	6
SOUTHERN U & AG & MECH C 7214							9	9	1	7	4	9	21	30
COLLEGE OF SOUTHERN UTAH 8700					1	1	3	4				1	1	5
SW ASSEMBLIES OF GOD COL 7476												1	1	1
UNIV OF S WEST LOUISIANA 7215	4	6	8	1	4	23	41	64		9	12	17	38	102
SW MISSOURI STATE COLL 4329	6	2	11	1		20	12	32	3	38	18	136	195	227
SOUTHWEST TEXAS ST COLL 7440	4	1	14			19	18	37	2	12	10	44	68	105
SOUTHWESTERN AT MEMPHIS 6230	4	10	9	1		24	6	30	6	14	23	4	47	77
SOUTHWESTERN COLLEGE 4720	4	7	21		2	34	29	63	2	18	15	29	64	127
SOUTHWESTERN ST COLLEGE 7323	2		4			6	6	12	2	1	1	28	32	44
SOUTHWESTERN UNIVERSITY 7441	5	2	15	1		23	8	31	3	16	27	22	68	99
SPELMAN COLLEGE 5840							3	3	1	1	2	6	10	13
SPRING HILL COLLEGE 6318	2	3	16			21	7	28		3	10	2	15	43
SPRINGFIELD COLLEGE 1452							12	12	23	9	5	112	149	161

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STANFCRD UNIVERSITY 9355	50	69	139	60	99	417	175	592	117	251	180	159	707	1299
STEPHEN F AUSTIN ST CCLL 7435	2		8			10	7	17	2	7	7	19	35	52
STERLING COLLEGE 4725		2	17			19	4	23	2	3	5	6	16	39
STETSCN UNIVERSITY 5909	8	2	11			21	8	29	2	9	13	12	36	65
CCL OF STEUBENVILLE THE 3118			1			1	1	2		1		1	2	4
STEVENS INST OF TECHNCL 2226	4	15	6		21	46		46	3	2	1	3	9	55
STILLMAN COLLEGE 6327												1	1	1
STONEHILL CCLLEGE 1467							4	4			1		1	5
STOUT STATE COLLEGE 3526							3	3		1	1	55	57	60
SUFFOLK UNIVERSITY 1454		1			1	2		2	1	1	4	3	9	11
SUL RCSS STATE COLLEGE 7447			3	1		4	5	9	1	1	3	9	14	23
SULPICIAN SEMINARY OF NW 9111											1		1	1
SUSQUEHANNA UNIVERSITY 2378		5			2	7	6	13	3	5	11	30	49	62
SWARTHMORE COLLEGE 2379	31	64	64		20	179	73	252	66	129	81	23	299	551
SWEET BRIAR COLLEGE 5430			1			1	2	3	1	5	5	2	13	16
SYRACUSE UNIVERSITY 2187	11	35	115	22	51	234	186	420	84	162	100	172	518	938
TABOR COLLEGE 4726			2			2	4	6	4	2	7	4	17	23
TALLADEGA COLLEGE 6323	3		4		1	8	5	13	3	8	13	17	41	54
UNIVERSITY OF TAMPA 5913	1	1	2			4		4	2	2	2	4	10	14
TARKIC COLLEGE 4336			18	1		19	6	25	3	4	6	11	24	49
TAYLOR UNIVERSITY 3233			3			3	6	9	1	5	15	19	40	49
TEMPLE UNIVERSITY 2380	10	35	91	3	1	140	77	217	84	74	71	153	382	599
TENN AGRIC & INDUS ST UN 6233			2			2	4	6	1	5	3	12	21	27
TENN POLYTECHNIC INST 6234	2	2	5		1	10	19	29		2	3	9	14	43
UNIVERSITY OF TENNESSEE 6240	9	15	39	3	34	100	104	204	19	51	41	84	195	399
TEXAS CHRISTIAN UNIV 7450	6	11	12	9		38	17	55	8	26	39	26	99	154
TEXAS COLLEGE 7451							2	2			2	7	9	11
TEXAS COL OF ARTS & IND 7448	3	8	10		3	24	5	29	1	12	9	7	29	58
TEXAS LUTHERAN COLLEGE 7452		1	1			2		2						2
TEXAS SOUTHERN UNIV 7468			2			2	5	7	1				1	8
TEXAS TECHNOLOGICAL CCLL 7455	3	5	27	7	31	73	49	122	2	23	26	34	85	207
UNIVERSITY OF TEXAS 7460	56	118	174	40	113	501	172	673	86	284	257	133	760	1433
TEXAS WESLEYAN COLLEGE 7456									1	2	3	9	15	15
TEXAS WOMANS UNIVERSITY 7454			4		1	5	11	16	1	3	14	20	38	54
THECL SEM REF EPISC CH 2382							1	1						1
THIEL COLLEGE 2383	2	1	7		1	11	8	19		4	3	16	23	42
TIFT COLLEGE 5809			1			1		1		1	2	3	6	7

Appendix 4

U.S. INSTITUTIONS OF BACCALAUREATE ORIGIN OF DOCTORATES IN TEN MAJOR FIELDS, 1920-1961 COMBINED

	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
UNIVERSITY OF TOLEDO 3157	1	8	26		6	41	29	70	6	16	15	18	55	125
TOUGALOO SRN CHRISTIAN C 6416							2	2	1	1	1	2	5	7
STATE TEACH COL TOWSON 5213									2	2		15	19	19
TRANSYLVANIA COLLEGE 6123	2	2	6			10	9	19	2	10	23	20	55	74
TRENTON STATE COLLEGE 2216	1					1		1	3	4	1	47	55	56
TREVECCA NAZARENE COLL 6236										2		1	3	3
TRINITY COLLEGE VT 1308									1			1	2	2
TRINITY COLLEGE CONN 1613	4	15	39	4	3	65	15	80	7	19	39	15	80	160
TRINITY COLLEGE D C 5316	1		2			3	7	10	6	14	27	7	54	64
TRINITY COLL DUKE UNIV 5648			2			2		2		1	3	2	6	8
TRINITY UNIVERSITY 7458	1		10			11	11	22	10	11	12	12	45	67
TROY STATE COLLEGE 6307							2	2		1	4	19	24	26
TUFTS UNIVERSITY 1458	4	16	62	16	21	119	74	193	29	36	40	37	142	335
TULANE UNIV OF LOUISIANA 7216	18	13	43	5	18	97	41	138	32	26	53	8	119	257
UNIVERSITY OF TULSA 7326	1	1	10	11	3	26	10	36	10	6	20	13	49	85
TUSCULUM COLLEGE 6237		2	6			8	4	12	1	3	2	7	13	25
TUSKEGEE INSTITUTE 6324			2		1	3	14	17		3	3	22	28	45
UNION COLLEGE NEB 4617		6	7			13	7	20	2	20	11	16	49	69
UNION COLLEGE KY 6124	1		3			4	2	6		3	3	12	18	24
UNION COLL & UNIVERSITY 2191	8	64	75	6	24	177	26	203	32	39	43	33	147	350
UNION THEOL SEMINARY N Y 2192											1	2	3	3
UNION UNIVERSITY 6238	3		12	1		16	7	23	4		6	9	19	42
AIR FORCE INST OF TECH 3173		1				1		1						1
U S COAST GUARD ACADEMY 1614	3	1		1	3	8		8	1				1	9
U S MERCHANT MARINE ACAD 2189		2			7	9	2	11		3	4	1	8	19
U S MILITARY ACADEMY 2190	4	19	3	3	43	72		72	7	37	7	8	59	131
U S NAVAL ACADEMY 5224	12	22	5	1	32	72	4	76	4	14	12	14	44	120
UPLAND COLLEGE 9382										1		2	3	3
UPPER IOWA UNIVERSITY 4224		1	3			4	7	11		3	5	12	20	31
UPSALA COLLEGE 2227	2	2	9	3		16	11	27	10	9	10	12	41	68
URSINUS COLLEGE 2387	2	6	27			35	19	54	9	20	22	31	82	136
URSULINE COLLEGE OHIO 3158			1			1	1	2		1	2		3	5
URSULINE COLLEGE KY 6127									1		4	1	6	6
UTAH ST U OF AG & AP SC 8707	2	26	43	5	18	94	294	388	25	92	35	75	227	615
UNIVERSITY OF UTAH 8706	17	53	131	36	89	326	146	472	68	111	108	122	409	881
VALDOSTA STATE COLLEGE 5823							2	2	1	1		2	4	6
VALLEY CITY ST TEACH COL 4406			2			2		2	2	11	2	28	43	45

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U.S. INSTITUTIONS OF BACCALAUREATE ORIGIN OF DOCTORATES IN TEN MAJOR FIELDS, 1920-1961 COMBINED

	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
VALPARAISO UNIVERSITY 3236	2	10	17		4	33	18	51	11	13	15	23	62	113
VANDERCOOK COL OF MUSIC 3389											1		1	1
VANDERBILT UNIVERSITY 6242	9	17	50	8	15	99	25	124	21	51	89	25	186	310
VASSAR COLLEGE 2195	11	14	30	4		59	59	118	46	82	93	21	242	360
VENNARD COLLEGE 4232												1	1	1
U OF VERMONT & ST AG COL 1309	4	8	45	2	7	66	52	118	8	37	30	42	117	235
VILLA MADONNA COLLEGE 6128	1	2	4			7	1	8		1	4		5	13
VILLA MARIA COLLEGE 2388							4	4	1			2	3	7
VILLANOVA UNIVERSITY 2389		7	28		16	51	15	66		13	21	8	42	108
VIRGINIA MILITARY INST 5435	2	9	33		8	52	3	55		9	3	2	14	69
VIRGINIA POLYTECH INST 5436	7	13	46	10	65	141	99	240	1	25	7	13	46	286
VIRGINIA STATE COLLEGE 5438		4	2			6	8	14		6	2	37	45	59
VIRGINIA UNION UNIV 5440			5			5	4	9	2	12	7	14	35	44
UNIVERSITY OF VIRGINIA 5433	17	45	92	20	14	188	65	253	30	90	116	33	269	522
VITERBO COLLEGE 3528			1			1		1		1		2	3	4
WABASH COLLEGE 3239	4	11	58			73	55	128	5	17	42	20	84	212
WAGNER COLLEGE 2196	2	2	8			12	16	28	1	6	4	10	21	49
WAKE FOREST COLLEGE 5642	9	16	17		1	43	21	64	7	30	39	21	97	161
WALLA WALLA COLLEGE 9115	3	2	5			10	14	24	1	12	11	9	33	57
WARNER PACIFIC COLLEGE 9228												2	2	2
WARTBURG COLLEGE 4226	3		11			14	3	17	2	2	16	6	26	43
WARTBURG THEOLOGICAL SEM 4227												1	1	1
WASHBURN UNIV OF TOPEKA 4728	7	2	10	1	1	21	15	36	10	18	19	29	76	112
WASHINGTON & JEFFERSON C 2391	19	13	26		5	63	12	75	4	15	25	24	68	143
WASHINGTON AND LEE UNIV 5441	1	5	26	7		39	10	49	7	48	42	10	107	156
WASHINGTON COLLEGE 5228	1	1	15			17	5	22	6	1	3	10	20	42
WASHINGTON ST TEACH COLL 1114							1	1				2	2	3
WASHINGTON STATE UNIV 9110	12	30	54	15	25	136	180	316	21	54	34	65	174	490
WASHINGTON UNIVERSITY MO 4339	14	51	83	20	74	242	88	330	71	87	101	53	312	642
UNIVERSITY OF WASHINGTON 9113	40	77	205	62	112	496	277	773	89	259	227	196	771	1544
WAYLAND BAPTIST COLLEGE 7461			1			1		1	1		1		2	3
WAYNE STATE UNIVERSITY 3433	16	22	96	7	33	174	71	245	60	90	95	129	374	619
WAYNESBURG COLLEGE 2393	1		5	1		7	14	21		8	3	13	24	45
WEBB INST OF NAVAL ARCH 2197	4	5			6	15		15	1				1	16
WEBSTER COLLEGE 4340			2			2	1	3	1	2	6		9	12
WELLESLEY COLLEGE 1460	13	10	13	3		39	76	115	36	70	105	34	245	360
WELLS COLLEGE 2198	2		1			3	1	4		7	15	5	27	31

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	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Biological Sciences	TOTAL NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL SOC. SCI-ARTS-EDUC.	GRAND TOTAL ALL FIELDS
WESLEYAN COLLEGE 5845			1			1	1	2	2		10	4	16	18
WESLEYAN UNIVERSITY 1616	8	36	69	12	3	128	59	187	39	79	118	31	267	454
WEST CHESTER STATE COLL 2360	1	2	2	1	1	7	6	13	2	10	4	64	80	93
WEST LIBERTY STATE COLL 5514	1		2			3	3	6		2	3	6	11	17
WEST TEXAS STATE COLLEGE 7462	5	4	5	1		15	6	21	6	8	18	34	66	87
W VIRGINIA INST OF TECH 5515	1		3			4	3	7		1	1	4	6	13
WEST VIRGINIA STATE COLL 5516			3			3	5	8	1	4	6	14	25	33
WEST VIRGINIA UNIVERSITY 5517	10	18	84	11	45	168	152	320	22	47	50	73	192	512
W VIRGINIA WESLEYAN COLL 5518	2		25		2	29	14	43	4	1	6	14	25	68
WESTERN CAROLINA COLLEGE 5641							4	4		1	1	16	18	22
WESTERN COLL FOR WOMEN 3160	2		5			7	6	13	3	2	7	3	15	28
WESTERN ILLINOIS UNIV 3390	1	1	9	1		12	10	22	4	8	9	41	62	84
WESTERN KENTUCKY ST COLL 6129	4	10	22	1	1	38	26	64	3	26	13	39	81	145
WESTERN MARYLAND COLLEGE 5227		5	7		1	13	16	29	7	6	10	25	48	77
WESTERN MICHIGAN UNIV 3431	3	6	16			25	16	41	13	26	45	80	164	205
WESTERN MONT COL OF EDUC 8107							1	1			1	7	8	9
WESTERN RESERVE UNIV 3159	11	18	83	2	1	115	84	199	88	68	93	41	290	489
WESTERN ST COL OF COLO 8412			12			12	8	20	1	4	4	16	25	45
WESTERN WASHINGTON ST CO 9114			4	1		5		5	6	5	3	29	43	48
STATE COLL AT WESTFIELD 1435												3	3	3
WESTMAR COLLEGE 4228	2		4			6	2	8	1	1	5	10	17	25
WESTMINSTER CHOIR COLL 2228											1	1	2	2
WESTMINSTER COLLEGE PA 2394	5	3	16		1	25	12	37	8	10	19	25	62	99
WESTMINSTER COLLEGE MO 4342	4	1	12	1		18	18	36	3	14	11	12	40	76
WESTMINSTER COLLEGE UTAH 8710							1	1	1				1	2
WESTMONT COLLEGE 9362	1					1		1		2			2	3
WHEATON COLLEGE MASS 1461			1			1	5	6	2	5	6	6	19	25
WHEATON COLLEGE ILL 3391	5	4	36	11		56	34	90	2	29	88	37	156	246
WHEELOCK COLLEGE 1462												3	3	3
WHITMAN COLLEGE 9116	4	22	19	1	2	48	15	63	6	19	26	25	76	139
WHITTIER COLLEGE 9363	1	3	20	2		26	14	40	7	11	10	27	55	95
WHITWORTH COLLEGE 9117	2		5			7	5	12	4	2	5	6	17	29
UNIVERSITY OF WICHITA 4718	2	5	29	5	2	43	16	59	12	17	23	27	79	138
WILBERFORCE UNIVERSITY 3161	2		1			3	2	5	1	2	10	12	25	30
WILEY COLLEGE 7463		1	3			4	1	5		1	7	5	13	18
WILKES COLLEGE 2396			9			9	3	12	3	1		1	5	17
WILLAMETTE UNIVERSITY 9220	5	11	26		1	43	13	56	12	24	26	36	98	154

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WILLIAM CAREY COLLEGE 6419												1	1	1
WILLIAM JENNINGS BRYAN C 6244									1		4	1	6	6
WILLIAM JEWELL COLLEGE 4343	2	8	28		3	41	7	48	8	15	26	24	73	121
COLL OF WILLIAM & MARY 5407	3	26	40		3	72	38	110	18	33	45	47	143	253
WM MITCHELL COL OF LAW 4130										1	1		2	2
WILLIAM PENN COLLEGE 4229	2		9	1		12	5	17	2	13	16	11	42	59
WILLIAMS COLLEGE 1463	8	27	52	21	8	116	19	135	10	83	100	14	207	342
WILLIMANTIC STATE COLL 1617									1			6	7	7
WILMINGTON COLLEGE 3162	1	2	6		1	10	17	27		3	6	14	23	50
WILSON COLLEGE 2397	3	1	4			8	15	23	2	6	18	4	30	53
WINONA STATE COLLEGE 4124		1	1	1		3	4	7	5	6	5	21	37	44
WINSTON SALEM TEACH COLL 5643									1			2	3	3
WINTHROP COLLEGE 5729	3		1			4	5	9	1	4	10	10	25	34
WISCON CONSERVATORY INC 3529			1			1		1	1		1		2	3
WIS ST C EAU CLAIRE 3530			4	1		5		5	1	7	3	21	32	37
WISC ST C LA CROSSE 3531			2			2	4	6		4	2	56	62	68
WISC ST COLL OSHKOSH 3533		4	10			14	3	17	2	2	3	16	23	40
WISC ST C PLATTEVILLE 3534			1			1	1	2		6	4	18	28	30
WISC ST C RIVER FALLS 3534		2	7	1	1	11	13	24	1	11	3	18	33	57
WISC ST C STEVENS PT 3535			3			3	2	5	2	6		26	34	39
WISC ST C SUPERIOR 3506	3	1	4			8	10	18	2	5	3	23	33	51
WISC ST C WHITEWATER 3537		1	2			3	5	8	1	6	9	50	66	74
UNIVERSITY OF WISCONSIN 3527	47	108	370	74	192	791	856	1647	145	508	375	358	1386	3033
WITTENBERG UNIVERSITY 3163	4	5	19	2		30	16	46	19	17	25	27	88	134
WOFFORD COLLEGE 5730	10	2	14			26	6	32	3	16	42	25	86	118
WOMANS COLLEGE DUKE UNIV 5649												1	1	1
WOMENS COLLEGE U OF N C 5645			2			2	16	18	3	11	13	15	42	60
WOMANS MED COLLEGE OF PA 2398							3	3						3
WOODSTOCK COLLEGE 5230	1	7	2			10	2	12	4	14	34	2	54	66
COLLEGE OF WOOSTER 3119	9	27	68	18	3	125	42	167	11	66	78	42	197	364
WORCESTER POLYTECH INST 1464	3	22	48	2	40	115	9	124	1	3	1	2	7	131
STATE COLL AT WORCESTER 1436									1	3	2	6	12	12
UNIVERSITY OF WYOMING 8301	7	7	17	20	5	56	66	122	11	26	12	36	85	207
XAVIER UNIVERSITY OHIO 3165	3	3	27	2		35	5	40	2	12	27	10	51	91
XAVIER UNIVERSITY LA 7218	1		2			3	4	7		3		2	5	12
YALE UNIVERSITY 1618	51	141	238	54	127	611	149	760	73	362	457	95	987	1747
YANKTON COLLEGE 4513	2		10		1	13	14	27	6	12	13	12	43	70

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YESHIVA UNIVERSITY 2199	11	4	15			30	8	38	21	22	49	23	115	153
YOUNGSTOWN UNIV THE 3166	1		13		5	19	5	24	4	4	4	7	19	43
ST MARYS SEMINARY 4333							2	2	1		6	4	11	13
PONTIF COLL JOSEPHINUM 3175							1	1			1	1	2	3
ST MARYS SEMINARY 4333			1			1		1		1			1	2
TENNESSEE TEMPLE SCHOOLS 6251									1				1	1
UNKN DEFUNCT	26	48	110	21	31	236	225	461	76	277	489	324	1166	1627
TOTAL	4401	8766	22223	3150	8291	46831	27917	74748	10667	21787	24236	25314	82004	156752

Appendix 5

LEADING BACCALAUREATE SOURCES BY DECADE OF DOCTORATE, IN FIVE MAJOR FIELDS

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
UNIV OF CALI-	1920-29	91	57	62	33	18	261
FORNIA BERK	1930-39	170	146	134	83	45	578
	1940-49	259	231	133	71	58	752
9356	1950-59	637	428	418	183	190	1856
	1960-61	129	79	90	29	32	359
TOTAL,	1920-61	1286	941	837	399	343	3806
CITY COLLEGE OF	1920-29	38	14	19	34	15	120
THE CITY OF NY	1930-39	76	39	54	91	61	321
	1940-49	228	82	115	67	114	606
2188	1950-59	661	201	528	160	273	1823
	1960-61	135	34	134	34	47	384
TOTAL,	1920-61	1138	370	850	386	510	3254
UNIVERSITY OF	1920-29	100	71	53	21	28	273
ILLINOIS	1930-39	214	110	106	67	42	539
	1940-49	262	169	87	65	58	641
3388	1950-59	545	298	242	124	157	1366
	1960-61	149	69	68	32	38	356
TOTAL,	1920-61	1270	717	556	309	323	3175
UNIVERSITY OF	1920-29	107	76	70	61	21	335
CHICAGO	1930-39	161	101	92	83	51	488
	1940-49	197	109	159	100	49	614
3387	1950-59	416	174	459	225	103	1377
	1960-61	76	17	79	48	11	231
TOTAL,	1920-61	957	477	859	517	235	3045
UNIVERSITY OF	1920-29	94	92	90	22	30	328
WISCONSIN	1930-39	167	179	125	88	39	598
	1940-49	138	168	92	62	66	526
3527	1950-59	320	355	286	162	187	1310
	1960-61	72	62	60	41	36	271
TOTAL,	1920-61	791	856	653	375	358	3033
HARVARD	1920-29	73	17	46	95	18	249
UNIVERSITY	1930-39	110	41	142	142	27	462
	1940-49	200	54	122	121	25	522
1422	1950-59	440	124	428	291	54	1337
	1960-61	81	17	92	84	13	287
TOTAL,	1920-61	904	253	830	733	137	2857
UNIVERSITY OF	1920-29	46	61	34	24	12	177
MINNESOTA	1930-39	128	138	85	56	35	442
	1940-49	168	184	93	64	75	584
4133	1950-59	276	263	287	127	157	1110
	1960-61	59	54	67	39	39	258
TOTAL,	1920-61	677	700	566	310	318	2571
UNIVERSITY OF	1920-29	98	36	53	45	10	242
MICHIGAN	1930-39	168	85	100	75	24	452
	1940-49	150	69	91	60	41	411
3430	1950-59	447	176	253	138	104	1118
	1960-61	91	47	62	48	27	275
TOTAL,	1920-61	954	413	559	366	206	2498
COLUMBIA	1920-29	40	22	58	41	55	216
UNIVERSITY	1930-39	98	49	90	83	132	452
	1940-49	118	36	94	105	147	500
2116	1950-59	298	96	234	213	225	1066
	1960-61	76	29	57	43	26	231
TOTAL,	1920-61	630	232	533	485	585	2465

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
CORNELL	1920-29	97	91	49	52	9	298
UNIVERSITY	1930-39	147	125	61	76	15	424
	1940-49	111	125	53	38	23	350
2120	1950-59	335	310	149	69	68	931
	1960-61	86	63	64	23	12	248
TOTAL,	1920-61	776	714	376	258	127	2251
NEW YORK	1920-29	14	4	10	22	8	58
UNIVERSITY	1930-39	54	18	53	61	87	273
	1940-49	91	49	57	64	111	372
2165	1950-59	305	139	361	139	251	1195
	1960-61	48	33	88	37	55	261
TOTAL,	1920-61	512	243	569	323	512	2159
OHIO STATE	1920-29	66	57	37	14	14	188
UNIVERSITY	1930-39	105	94	92	47	24	362
	1940-49	125	89	78	33	56	381
3142	1950-59	243	236	173	71	166	889
	1960-61	40	47	44	26	34	191
TOTAL,	1920-61	579	523	424	191	294	2011
YALE UNIVERSITY	1920-29	57	21	37	56	17	188
	1930-39	105	27	68	103	13	316
	1940-49	123	26	67	63	13	292
1618	1950-59	253	61	211	175	39	739
	1960-61	73	14	52	60	13	212
TOTAL,	1920-61	611	149	435	457	95	1747
UNIV OF CALI-	1920-29	1			2		3
FORNIA L A	1930-39	35	17	31	28	6	117
	1940-49	92	53	96	45	25	311
9365	1950-59	259	141	292	106	138	936
	1960-61	67	34	79	31	44	255
TOTAL,	1920-61	454	245	498	212	213	1622
UNIVERSITY OF	1920-29	36	20	27	22	12	117
WASHINGTON	1930-39	86	77	61	39	35	298
	1940-49	99	71	46	34	49	299
9113	1950-59	220	87	185	112	87	691
	1960-61	55	22	29	20	13	139
TOTAL,	1920-61	496	277	348	227	196	1544
MASS INSTITUTE	1920-29	53	15				68
OF TECHNOLOGY	1930-39	175	16	5		1	197
	1940-49	234	17	1	3	3	258
1427	1950-59	687	48	27	7	6	775
	1960-61	219	8	5			232
TOTAL,	1920-61	1368	104	38	10	10	1530
BROOKLYN	1930-39	7	1	4	3		15
COLLEGE	1940-49	83	36	49	16	11	195
	1950-59	314	134	314	126	103	991
2105	1960-61	80	28	81	34	36	259
TOTAL,	1920-61	484	199	448	179	150	1460
PENNSYLVANIA ST	1920-29	27	31	8	5	4	75
UNIVERSITY	1930-39	68	81	25	14	21	209
	1940-49	101	99	28	12	43	283
2362	1950-59	250	184	134	39	95	702
	1960-61	66	51	25	12	16	170
TOTAL,	1920-61	512	446	220	82	179	1439

Appendix 5

LEADING BACCALAUREATE SOURCES BY DECADE OF DOCTORATE, IN FIVE MAJOR FIELDS

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
UNIVERSITY OF TEXAS	1920-29	25	13	33	23	7	101
	1930-39	71	38	85	43	18	255
	1940-49	80	29	49	40	26	224
7460	1950-59	272	73	169	129	67	710
	1960-61	53	19	34	22	15	143
TOTAL,	1920-61	501	172	370	257	133	1433
UNIVERSITY OF PENNSYLVANIA	1920-29	30	17	65	36	12	160
	1930-39	45	32	80	86	42	285
	1940-49	88	36	39	50	39	252
2384	1950-59	180	73	137	92	51	533
	1960-61	39	18	34	25	6	122
TOTAL,	1920-61	382	176	355	289	150	1352
STANFORD UNIVERSITY	1920-29	43	17	38	18	17	133
	1930-39	79	44	70	49	25	267
	1940-49	66	40	61	29	31	227
9355	1950-59	184	61	170	67	77	559
	1960-61	45	13	29	17	9	113
TOTAL,	1920-61	417	175	368	180	159	1299
STATE UNIVERSITY OF IOWA	1920-29	40	18	44	24	25	151
	1930-39	82	33	64	50	23	252
	1940-49	45	37	54	51	27	214
4222	1950-59	93	77	157	120	75	522
	1960-61	15	16	26	28	17	102
TOTAL,	1920-61	275	181	345	273	167	1241
NORTHWESTERN UNIVERSITY	1920-29	19	10	25	13	2	69
	1930-39	51	30	54	41	11	187
	1940-49	43	27	59	43	30	202
3369	1950-59	190	57	140	125	73	585
	1960-61	32	12	31	28	12	115
TOTAL,	1920-61	335	136	309	250	128	1158
PRINCETON UNIVERSITY	1920-29	38	4	30	42	3	117
	1930-39	52	12	44	85	11	204
	1940-49	103	10	46	75	9	243
2221	1950-59	185	33	141	102	14	475
	1960-61	59	7	25	20	5	116
TOTAL,	1920-61	437	66	286	324	42	1155
PURDUE UNIVERSITY	1920-29	13	16	1	2	2	34
	1930-39	41	49	15		4	109
	1940-49	92	62	24	2	8	188
3226	1950-59	353	158	89	15	34	649
	1960-61	89	41	21	6	10	167
TOTAL,	1920-61	588	326	150	25	58	1147
OBERLIN COLLEGE	1920-29	42	13	23	21	8	107
	1930-39	62	40	45	69	18	234
	1940-49	84	31	45	52	30	242
3140	1950-59	131	50	126	86	55	448
	1960-61	22	18	36	24	13	113
TOTAL,	1920-61	341	152	275	252	124	1144
UNIVERSITY OF MISSOURI	1920-29	34	36	23	12	19	124
	1930-39	50	65	52	43	31	241
	1940-49	45	43	41	21	41	191
4338	1950-59	91	112	91	56	86	436
	1960-61	21	40	27	11	24	123
TOTAL,	1920-61	241	296	234	143	201	1115
UNIVERSITY OF NEBRASKA	1920-29	33	27	25	11	6	102
	1930-39	50	64	57	25	26	222
	1940-49	48	63	44	24	39	218
4618	1950-59	88	139	91	44	84	446
	1960-61	19	36	17	10	26	108
TOTAL,	1920-61	238	329	234	114	181	1096
IOWA ST UNIV OF SCI & TECH	1920-29	15	26	6		1	48
	1930-39	59	90	17		7	173
	1940-49	72	82	18	3	13	188
4212	1950-59	228	195	72	10	33	538
	1960-61	46	48	17	3	4	118
TOTAL,	1920-61	420	441	130	16	58	1065
INDIANA UNIVERSITY	1920-29	44	27	35	13	33	152
	1930-39	78	21	28	36	38	201
	1940-49	65	19	23	29	26	162
3220	1950-59	74	80	125	69	89	437
	1960-61	17	8	23	26	20	94
TOTAL,	1920-61	278	155	234	173	206	1046
RUTGERS THE ST UNIVERSITY	1920-29	11	23	2	3	1	40
	1930-39	27	32	7	13	9	88
	1940-49	35	65	18	11	29	158
2223	1950-59	175	187	108	36	55	561
	1960-61	36	37	26	8	8	115
TOTAL,	1920-61	284	344	161	71	102	962
SYRACUSE UNIV	1920-29	29	11	13	7	4	64
	1930-39	34	39	34	20	16	143
	1940-49	27	29	31	10	30	127
2187	1950-59	124	87	139	47	102	499
	1960-61	20	20	29	16	20	105
TOTAL,	1920-61	234	186	246	100	172	938
UNIVERSITY OF NORTH CAROLINA	1920-29	28	11	10	18	5	72
	1930-39	36	18	34	29	13	130
	1940-49	51	32	30	24	12	149
5640	1950-59	123	108	105	88	40	464
	1960-61	37	23	16	18	15	109
TOTAL,	1920-61	275	192	195	177	85	924
UNIVERSITY OF KANSAS	1920-29	34	33	21	11	7	106
	1930-39	52	42	46	26	14	180
	1940-49	43	38	36	18	19	154
4727	1950-59	120	73	83	59	64	399
	1960-61	22	12	18	11	16	79
TOTAL,	1920-61	271	198	204	125	120	918
UNIVERSITY OF PITTSBURGH	1920-29	17	9	6	7	3	42
	1930-39	35	49	25	37	34	180
	1940-49	57	34	39	20	42	192
2385	1950-59	93	68	117	47	95	420
	1960-61	16	14	16	12	13	71
TOTAL,	1920-61	218	174	203	123	187	905
UNIVERSITY OF UTAH	1920-29	11	3	15	3	6	38
	1930-39	34	20	23	23	11	111
	1940-49	66	31	25	22	19	163
8706	1950-59	170	75	92	44	69	450
	1960-61	45	17	24	16	17	119
TOTAL,	1920-61	326	146	179	108	122	881

Appendix 5

LEADING BACCALAUREATE SOURCES BY DECADE OF DOCTORATE, IN FIVE MAJOR FIELDS

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
CATHOLIC UNIV OF AMERICA 5302	1920-29	6	3	15	60	14	98
	1930-39	10	5	32	89	17	153
	1940-49	14	8	29	265	12	328
	1950-59	37	15	32	158	26	268
	1960-61	6	2	5	13	5	31
	TOTAL, 1920-61	73	33	113	585	74	878
MICHIGAN ST UNI OF AG & AP SCI 3421	1920-29	4	24	3		1	32
	1930-39	25	53	2	6	3	89
	1940-49	22	69	15	3	4	113
	1950-59	101	234	84	24	65	508
	1960-61	32	47	15	14	23	131
	TOTAL, 1920-61	184	427	119	47	96	873
JOHNS HOPKINS UNIVERSITY 5206	1920-29	65	9	29	25	4	132
	1930-39	78	22	25	29	13	167
	1940-49	90	18	23	11	12	154
	1950-59	142	39	42	28	22	273
	1960-61	42	9	13	3	2	69
	TOTAL, 1920-61	417	97	132	96	53	795
CALIFORNIA INST OF TECHNOLOGY 9305	1920-29	23					23
	1930-39	105	13	3	2		123
	1940-49	106	19		2		127
	1950-59	343	22	14	7	1	387
	1960-61	74	5				79
	TOTAL, 1920-61	651	59	17	11	1	739
DARTMOUTH COLLEGE 1201	1920-29	18	9	[illegible]	19	1	65
	1930-39	39	26	46	44	6	161
	1940-49	53	23	36	32	20	164
	1950-59	66	30	90	55	23	264
	1960-61	23	13	22	13	9	80
	TOTAL, 1920-61	199	101	212	[illegible]	59	734
BROWN UNIVERSITY 1501	1920-29	21	30	22	16	5	94
	1930-39	42	31	20	30	6	129
	1940-49	44	14	24	21	10	113
	1950-59	134	39	75	38	15	301
	1960-61	31	9	16	5	6	67
	TOTAL, 1920-61	272	123	157	110	42	704
UNIVERSITY OF COLORADO 8411	1920-29	18	7	15	6	5	51
	1930-39	45	16	25	10	11	107
	1940-49	46	24	17	18	12	117
	1950-59	128	52	90	38	39	347
	1960-61	28	10	21	8	7	74
	TOTAL, 1920-61	265	109	168	80	74	696
UNIVERSITY OF ROCHESTER 2194	1920-29	13	3	12	8	5	41
	1930-39	41	12	20	16	4	93
	1940-49	50	23	21	24	8	126
	1950-59	120	45	55	61	38	319
	1960-61	37	7	13	20	5	82
	TOTAL, 1920-61	261	90	121	129	60	661
WASHINGTON UNIVERSITY MO 4339	1920-29	21	8	5	6	2	42
	1930-39	37	15	21	19	4	96
	1940-49	22	15	26	22	4	89
	1950-59	125	47	90	44	34	340
	1960-61	37	3	16	10	9	75
	TOTAL, 1920-61	242	88	158	101	53	642
BOSTON UNIVERSITY 1409	1920-29	7	5	6	8	5	31
	1930-39	19	9	23	39	13	103
	1940-49	10	7	16	25	30	88
	1950-59	31	27	97	64	116	335
	1960-61	20	3	19	11	25	78
	TOTAL, 1920-61	87	51	161	147	189	635
UNIVERSITY OF OKLAHOMA 7325	1920-29	15	7	11	2	2	37
	1930-39	34	10	18	10	26	98
	1940-49	22	11	17	18	18	86
	1950-59	111	49	75	45	44	324
	1960-61	22	10	25	15	8	80
	TOTAL, 1920-61	204	87	146	90	98	625
WAYNE STATE UNIVERSITY 3433	1920-29		1				1
	1930-39	11	7	7	2	4	31
	1940-49	28	18	17	20	11	94
	1950-59	105	37	103	57	96	398
	1960-61	30	8	23	16	18	95
	TOTAL, 1920-61	174	71	150	95	129	619
BRIGHAM YOUNG UNIVERSITY 8701	1920-29	12	6	8	2	3	31
	1930-39	11	25	11	9	11	67
	1940-49	26	46	14	20	21	127
	1950-59	58	93	55	42	55	303
	1960-61	14	21	14	20	19	88
	TOTAL, 1920-61	121	191	102	93	109	616
UTAH STATE UNIV OF AGR & AP SC 8707	1920-29	9	19	5	2	3	38
	1930-39	16	43	13	3	8	83
	1940-49	20	56	22	5	13	116
	1950-59	42	139	68	21	44	314
	1960-61	7	37	9	4	7	64
	TOTAL, 1920-61	94	294	117	35	75	615
UNIVERSITY OF FLORIDA 5912	1920-29	3	2	1	3		9
	1930-39	27	15	7	3	17	69
	1940-49	25	29	19	9	14	96
	1950-59	93	102	81	30	55	361
	1960-61	21	21	15	6	13	76
	TOTAL, 1920-61	169	169	123	51	99	611
TEMPLE UNIVERSITY 2380	1920-29		1	1	2	7	11
	1930-39	13	5	14	8	23	63
	1940-49	30	9	15	15	20	89
	1950-59	81	54	99	38	84	356
	1960-61	16	8	29	8	19	80
	TOTAL, 1920-61	140	77	158	71	153	599
UNIVERSITY OF KENTUCKY 6126	1920-29	15	11	3	4	5	38
	1930-39	26	24	19	6	24	99
	1940-49	39	20	17	9	11	96
	1950-59	79	87	56	24	41	287
	1960-61	14	26	15	7	7	69
	TOTAL, 1920-61	173	168	110	50	88	589
KANSAS ST UNIV OF AG & AP SCI 4713	1920-29	7	30	4	1		42
	1930-39	19	53	13	3	10	98
	1940-49	26	52	10	1	10	99
	1950-59	72	109	49	12	21	263
	1960-61	20	30	8	3	13	74
	TOTAL, 1920-61	144	274	84	20	54	576

Appendix 5

LEADING BACCALAUREATE SOURCES BY DECADE OF DOCTORATE, IN FIVE MAJOR FIELDS

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
UNIVERSITY OF	1920-29	6		8	3	2	19
SOUTHERN CALIF	1930-39	10	11	20	17	18	76
	1940-49	13	11	33	15	32	104
9358	1950-59	36	46	100	62	63	307
	1960-61	13	5	26	10	16	70
TOTAL,	1920-61	78	73	187	107	131	576
DEPAUW	1920-29	12	7	9	10	4	42
UNIVERSITY	1930-39	43	37	23	17	6	126
	1940-49	49	23	30	26	16	144
3207	1950-59	56	41	49	43	32	221
	1960-61	6	7	16	8	5	42
TOTAL,	1920-61	166	115	127	104	63	575
CARNEGIE INST	1920-29	6	2	3	1		12
OF TECHNOLOGY	1930-39	42	1	1	1	6	51
	1940-49	96	3	2	6	7	114
2307	1950-59	265	5	10	19	16	315
	1960-61	61		4	5	3	73
TOTAL,	1920-61	470	11	20	32	32	565
HUNTER COLLEGE	1920-29	10	2	6	11	1	30
	1930-39	16	8	13	19	28	84
	1940-49	7	22	20	31	34	114
2129	1950-59	30	46	85	54	42	257
	1960-61	9	10	20	20	19	78
TOTAL,	1920-61	72	88	144	135	124	563
UNIVERSITY OF	1920-29	8	25	3			36
MASSACHUSETTS	1930-39	22	63	5	9	4	103
	1940-49	15	73	7	5	4	104
1459	1950-59	56	139	36	12	15	258
	1960-61	14	28	12	3	3	60
TOTAL,	1920-61	115	328	63	29	26	561
SWARTHMORE	1920-29	7		12	4	5	28
COLLEGE	1930-39	25	8	15	5	4	57
	1940-49	49	15	30	15	6	115
2379	1950-59	78	39	106	46	7	276
	1960-61	20	11	32	11	1	75
TOTAL,	1920-61	179	73	195	81	23	551
UNIVERSITY OF	1920-29	7	10	2	1		20
MARYLAND	1930-39	21	40	3	3	1	68
	1940-49	45	47	6	3	5	106
5226	1950-59	69	129	41	18	28	285
	1960-61	21	21	16	2	10	70
TOTAL,	1920-61	163	247	68	27	44	549
GEORGE WASH	1920-29	15	8	11	16	1	51
UNIVERSITY	1930-39	13	18	29	15	12	87
	1940-49	34	15	20	13	15	97
5307	1950-59	60	70	87	28	11	256
	1960-61	9	6	15	10	6	46
TOTAL,	1920-61	131	117	162	82	45	537
LA STATE UNIV &	1920-29	6		3	2	2	13
AG & MECH COL	1930-39	17	16	12	4	15	64
	1940-49	24	29	17	12	7	89
7208	1950-59	92	85	50	38	42	307
	1960-61	16	10	14	11	13	64
TOTAL,	1920-61	155	140	96	67	79	537
MIAMI	1920-29	14	3	6	3	2	28
UNIVERSITY	1930-39	31	26	26	15	6	104
	1940-49	32	30	24	18	9	113
3135	1950-59	69	30	63	30	26	218
	1960-61	21	12	14	11	11	69
TOTAL,	1920-61	167	101	133	77	54	532
UNIVERSITY OF	1920-29	28	7	11	17	2	65
VIRGINIA	1930-39	36	15	16	25	10	102
	1940-49	42	13	29	27	1	112
5433	1950-59	67	25	55	39	14	200
	1960-61	15	5	9	8	6	43
TOTAL,	1920-61	188	65	120	116	33	522
UNIVERSITY OF	1920-29	12	9	5	9	2	37
CINCINNATI	1930-39	33	17	18	23	8	99
	1940-49	48	9	22	21	18	118
3156	1950-59	66	28	49	31	25	199
	1960-61	28	6	13	10	9	66
TOTAL,	1920-61	187	69	107	94	62	519
FORDHAM	1920-29	2		2	26	13	43
UNIVERSITY	1930-39	14	12	16	24	9	75
	1940-49	16	13	20	13	14	76
2123	1950-59	65	44	61	54	36	260
	1960-61	27	10	14	5	8	64
TOTAL,	1920-61	124	79	113	122	80	518
OREGON STATE	1920-29	16	27	1			44
UNIVERSITY	1930-39	42	38	5	3	9	97
	1940-49	38	35	7	7	12	99
9211	1950-59	71	93	15	5	33	217
	1960-61	16	32	2	3	8	61
TOTAL,	1920-61	183	225	30	18	62	518
OKLAHOMA ST U	1920-29	8	7			1	16
OF AGR & AP SC	1930-39	7	20	2	1	4	34
	1940-49	14	41	10	2	10	77
7314	1950-59	45	123	46	16	63	293
	1960-61	20	40	12	5	16	93
TOTAL,	1920-61	94	231	70	24	94	513
WEST VIRGINIA	1920-29	19	12	7	4	9	51
UNIVERSITY	1930-39	27	32	17	9	13	98
	1940-49	26	25	13	8	12	84
5517	1950-59	80	65	24	24	35	228
	1960-61	16	18	8	5	4	51
TOTAL,	1920-61	168	152	69	50	73	512
AMHERST COLLEGE	1920-29	10	5	16	15	1	47
	1930-39	25	8	27	34	7	101
	1940-49	26	7	37	27	7	104
1402	1950-59	58	16	52	44	12	182
	1960-61	21	5	16	14		56
TOTAL,	1920-61	140	41	148	134	27	490
WASHINGTON ST	1920-29	6	9	5		3	23
UNIVERSITY	1930-39	26	39	2	6	6	79
	1940-49	27	36	12	6	12	93
9110	1950-59	63	80	43	18	36	240
	1960-61	14	16	13	4	8	55
TOTAL,	1920-61	136	180	75	34	65	490

Appendix 5

LEADING BACCALAUREATE SOURCES BY DECADE OF DOCTORATE, IN FIVE MAJOR FIELDS

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
REED COLLEGE	1920-29	2	3	5	1	2	13
	1930-39	27	9	20	4	2	62
	1940-49	35	10	11	14	3	73
9215	1950-59	77	21	69	13	16	196
	1960-61	19	6	12	1		38
TOTAL,	1920-61	160	49	117	33	23	382
UNIVERSITY OF GEORGIA	1920-29	6	5	3	3	1	18
	1930-39	17	8	6	10	2	43
	1940-49	15	16	12	6	3	52
5841	1950-59	25	76	40	20	44	205
	1960-61	8	20	8	7	12	55
TOTAL,	1920-61	71	125	69	46	62	373
STATE COLLEGE OF IOWA	1920-29	7	4	18	1	9	39
	1930-39	8	6	16	7	22	59
	1940-49	4	6	17	11	32	70
4211	1950-59	13	14	28	24	82	161
	1960-61	1	5	7	5	25	43
TOTAL,	1920-61	33	35	86	48	170	372
COLLEGE OF WOOSTER	1920-29	7	3	5	3	2	20
	1930-39	26	16	18	23	10	93
	1940-49	27	10	14	20	8	79
3119	1950-59	55	9	31	26	19	140
	1960-61	10	4	9	6	3	32
TOTAL,	1920-61	125	42	77	78	42	364
NORTH TEXAS STATE UNIV	1920-29	1		1			2
	1930-39	8	5	4		16	33
	1940-49	17	13	7	3	40	80
7429	1950-59	38	17	30	22	84	191
	1960-61	7	6	10	11	23	57
TOTAL,	1920-61	71	41	52	36	163	363
ST LOUIS UNIVERSITY	1920-29	3	1		1	1	6
	1930-39	9	6	12	26	4	57
	1940-49	19	7	18	22	2	68
4332	1950-59	61	20	51	34	21	187
	1960-61	9	3	17	14	2	45
TOTAL,	1920-61	101	37	98	97	30	363
VASSAR COLLEGE	1920-29	14	7	28	20	2	71
	1930-39	12	21	30	26	6	95
	1940-49	18	11	26	12	6	73
2195	1950-59	15	19	36	28	6	104
	1960-61		1	8	7	1	17
TOTAL,	1920-61	59	59	128	93	21	360
WELLESLEY COLLEGE	1920-29	6	18	16	23	1	64
	1930-39	11	26	22	23	7	89
	1940-49	9	14	28	19	10	80
1460	1950-59	13	15	33	30	13	104
	1960-61		3	7	10	3	23
TOTAL,	1920-61	39	76	106	105	34	360
RICE UNIV	1920-29	10	3	1			14
	1930-39	27	7	5	1		40
	1940-49	55	5	8	5	5	78
7434	1950-59	114	13	13	20	12	172
	1960-61	33	5	5	10	2	55
TOTAL,	1920-61	239	33	32	36	19	359

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
UNIVERSITY OF IDAHO	1920-29	6	1	2	1		10
	1930-39	16	33	9	5	10	73
	1940-49	19	41	8	4	9	81
8207	1950-59	33	58	22	15	26	154
	1960-61	3	19	5	3	7	37
TOTAL,	1920-61	77	152	46	28	52	355
UNION COLLEGE & UNIVERSITY	1920-29	8	2	1	3	1	15
	1930-39	23	3	8	9	4	47
	1940-49	31	5	13	4	8	61
2191	1950-59	88	13	39	22	20	182
	1960-61	27	3	10	5		45
TOTAL,	1920-61	177	26	71	43	33	350
MOUNT HOLYOKE COLLEGE	1920-29	17	25	10	16	2	70
	1930-39	25	32	25	19	5	106
	1940-49	12	27	18	19	2	78
1439	1950-59	13	19	19	18	8	77
	1960-61	4	3	3	7	1	18
TOTAL,	1920-61	71	106	75	79	18	349
UNIVERSITY OF ARIZONA	1920-29	4	3	2		1	10
	1930-39	21	14	14	6	3	58
	1940-49	24	19	14	4	9	70
8604	1950-59	47	38	41	22	13	161
	1960-61	13	9	11	7	8	48
TOTAL,	1920-61	109	83	82	39	34	347
LEHIGH UNIV	1920-29	17	1	2	2		22
	1930-39	27	2	4	5	4	42
	1940-49	53	8	2	4	6	73
2332	1950-59	117	13	14	10	3	157
	1960-61	37	5	4	5	2	53
TOTAL,	1920-61	251	29	26	26	15	347
WILLIAMS COLLEGE	1920-29	9	2	9	14		34
	1930-39	22	1	12	21		56
	1940-49	14	6	15	19	4	58
1463	1950-59	59	6	52	38	7	162
	1960-61	12	4	5	8	3	32
TOTAL,	1920-61	116	19	93	100	14	342
TUFTS UNIVERSITY	1920-29	11	5		1	5	22
	1930-39	14	12	5	4	1	36
	1940-49	10	5	8	7	3	33
1458	1950-59	66	39	35	18	22	180
	1960-61	18	13	17	10	6	64
TOTAL,	1920-61	119	74	65	40	37	335
HAVERFORD COLLEGE	1920-29	15	4	6	7	2	34
	1930-39	13	10	7	21	1	52
	1940-49	25	4	16	21	1	67
2324	1950-59	55	9	31	40	4	139
	1960-61	13	5	3	10	1	32
TOTAL,	1920-61	121	32	63	99	9	324
FRANKLIN & MARSHALL COLLEGE	1920-29	9	3	4	3	12	31
	1930-39	21	11	6	9	21	68
	1940-49	28	6	15	8	9	66
2318	1950-59	59	15	32	14	12	132
	1960-61	14	2	7	1	2	26
TOTAL,	1920-61	131	37	64	35	56	323

Appendix 5

LEADING BACCALAUREATE SOURCES BY DECADE OF DOCTORATE, IN FIVE MAJOR FIELDS

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS			Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
WESTERN RESERVE	1920-29	4	3	9	4	1	21	UNIVERSITY OF	1920-29	2	2	2			6
UNIVERSITY	1930-39	15	13	22	24	2	76	BUFFALO	1930-39	16	7	11	4	3	41
	1940-49	29	20	18	20	8	95		1940-49	28	7	10	9	2	56
3159	1950-59	51	40	83	39	23	236	2193	1950-59	98	33	58	22	48	259
	1960-61	16	8	24	6	7	61		1960-61	13	8	10	5	10	46
TOTAL,	1920-61	115	84	156	93	41	489	TOTAL,	1920-61	157	57	91	40	63	408
UNIVERSITY OF	1920-29	5	2	5	7	2	21	UNIVERSITY OF	1920-29	4	6	3	6	3	22
NOTRE DAME	1930-39	41	4	7	10	3	65	TENNESSEE	1930-39	9	7	8	3	5	32
	1940-49	40	6	11	17	9	83		1940-49	14	19	7	6	10	56
3235	1950-59	110	19	38	37	15	219	6240	1950-59	58	61	38	18	47	222
	1960-61	39	4	12	15	8	78		1960-61	15	11	14	8	19	67
TOTAL,	1920-61	235	35	73	86	37	466	TOTAL,	1920-61	100	104	70	41	84	399
UNIVERSITY OF	1920-29	12	6	7	9	2	36	POMONA COLLEGE	1920-29	12	7	10	6	2	37
DENVER	1930-39	17	21	13	7	13	71		1930-39	23	11	16	15	8	73
	1940-49	16	12	11	10	14	63		1940-49	24	13	15	10	13	75
8410	1950-59	38	19	66	50	65	238	9341	1950-59	60	17	42	15	25	159
	1960-61	7	3	17	4	23	54		1960-61	13	14	14	7	5	53
TOTAL,	1920-61	90	61	114	80	117	462	TOTAL,	1920-61	132	62	97	53	53	397
WESLEYAN	1920-29	13	8	12	17	4	54	EMORY	1920-29	11	8	5	3	1	28
UNIVERSITY	1930-39	25	20	26	40	5	116	UNIVERSITY	1930-39	25	12	10	24	4	75
	1940-49	24	9	22	20	7	82		1940-49	29	10	8	22	5	74
1616	1950-59	54	19	43	31	12	159	5815	1950-59	51	37	45	31	10	174
	1960-61	12	3	15	10	3	43		1960-61	14	4	10	11	6	45
TOTAL,	1920-61	128	59	118	118	31	454	TOTAL,	1920-61	130	71	78	91	26	396
UNIVERSITY OF	1920-29	15	6	10	6	8	45	UNIVERSITY OF	1920-29		6				6
OREGON	1930-39	29	19	30	13	9	100	CONNECTICUT	1930-39	1	19	1			21
	1940-49	6	4	16	14	25	65		1940-49	5	26	7	1	6	45
9217	1950-59	34	15	52	31	64	196	1615	1950-59	56	105	68	11	20	260
	1960-61	5	3	14	6	16	44		1960-61	17	15	16	5	5	58
TOTAL,	1920-61	89	47	122	70	122	450	TOTAL,	1920-61	79	171	92	17	31	390
DUKE UNIVERSITY	1920-29	4		3	1	1	9	OHIO UNIVERSITY	1920-29	7	8	14		9	38
	1930-39	20	12	15	18	5	70		1930-39	9	3	12	6	11	41
	1940-49	25	4	28	13	8	78		1940-49	21	10	21	6	19	77
5612	1950-59	67	37	51	41	25	221	3143	1950-59	53	26	43	18	46	186
	1960-61	23	7	18	9	10	67		1960-61	8	7	12	9	12	48
TOTAL,	1920-61	139	60	115	82	49	445	TOTAL,	1920-61	98	54	102	39	97	390
RENSSELAER POLY	1920-29	20		1			21	AGR & MECH COLL	1920-29	4	9	2			15
TECHNIC INST	1930-39	54	3			1	58	OF TEXAS	1930-39	6	16	3	2	1	28
	1940-49	50	5	1		2	58		1940-49	18	17	4		1	40
2174	1950-59	221	12	1	3	4	241	7401	1950-59	92	97	25	6	24	244
	1960-61	50	4	1	1	1	57		1960-61	21	31	3		6	61
TOTAL,	1920-61	395	24	4	4	8	435	TOTAL,	1920-61	141	170	37	8	32	388
OHIO WESLEYAN	1920-29	17	9	15	11	5	57	UNIVERSITY OF	1920-29	9	10	3		2	24
UNIVERSITY	1930-39	28	13	34	39	20	134	NEW HAMPSHIRE	1930-39	16	15	3	3	4	41
	1940-49	12	6	15	16	21	70		1940-49	30	21	5	1	4	61
3144	1950-59	27	9	30	18	23	107	1207	1950-59	71	64	38	8	39	220
	1960-61	10	6	15	11	7	49		1960-61	11	13	7	6	4	41
TOTAL,	1920-61	94	43	109	95	76	417	TOTAL,	1920-61	137	123	56	18	53	387
UNIVERSITY OF	1920-29	3		4	2	2	11	UNIVERSITY OF	1920-29	9	3	3	2		17
ALABAMA	1930-39	9	8	9	9	8	43	ARKANSAS	1930-39	17	18	3	7	7	52
	1940-49	21	14	20	15	21	91		1940-49	24	15	13	5	6	63
6325	1950-59	46	27	54	42	49	218	7120	1950-59	49	56	48	23	25	201
	1960-61	11	9	12	6	14	52		1960-61	9	19	7	9	8	52
TOTAL,	1920-61	90	58	99	74	94	415	TOTAL,	1920-61	108	111	74	46	46	385

Appendix 5

LEADING BACCALAUREATE SOURCES BY DECADE OF DOCTORATE, IN FIVE MAJOR FIELDS

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
BAYLOR UNIVERSITY	1920-29	6	5	8	3	3	25
	1930-39	10	12	9	9	8	48
	1940-49	5	7	15	12	9	48
7406	1950-59	35	20	41	43	24	163
	1960-61	8	1	11	11	7	38
TOTAL,	1920-61	64	45	84	78	51	322
QUEENS COL OF THE CITY OF NY	1940-49	23	2	5	4		34
	1950-59	69	21	74	38	16	218
	1960-61	14	12	29	11	4	70
2173 TOTAL,	1920-61	106	35	108	53	20	322
BOSTON COLLEGE	1920-29	1	1	1	5		8
	1930-39	4	3	9	15	3	34
	1940-49	10	4	25	12	8	59
1408	1950-59	56	11	36	34	40	177
	1960-61	11	6	8	11	6	42
TOTAL,	1920-61	82	25	79	77	57	320
ILLINOIS INST OF TECHNOLOGY	1920-29	3			1	1	5
	1930-39	11		1	2		14
	1940-49	36	2	4	6	4	52
3341	1950-59	160	11	16	9	10	206
	1960-61	29	1	5	1	5	41
TOTAL,	1920-61	239	14	26	19	20	318
POLYTECH INST OF BROOKLYN	1920-29	4	1	1			6
	1930-39	25	1	2		3	31
	1940-49	77	4			1	82
2171	1950-59	138	4	1		3	146
	1960-61	51	1			1	53
TOTAL,	1920-61	295	11	4		8	318
AUBURN UNIVERSITY	1920-29	9	11	4		2	26
	1930-39	11	12	4		4	31
	1940-49	15	15		3	4	37
6302	1950-59	46	66	16	7	38	173
	1960-61	18	13	7	5	5	48
TOTAL,	1920-61	99	117	31	15	53	315
SMITH COLLEGE	1920-29	5	17	17	19	1	59
	1930-39	7	20	25	26	5	83
	1940-49	11	11	23	14	8	67
1451	1950-59	9	12	40	22	6	89
	1960-61		2	4	7	4	17
TOTAL,	1920-61	32	62	109	88	24	315
UNIVERSITY OF MAINE	1920-29	5	9	4	3	1	22
	1930-39	13	10	10	3	8	44
	1940-49	12	19	12	5	6	54
1111	1950-59	31	61	26	10	13	141
	1960-61	12	22	3	3	10	50
TOTAL,	1920-61	73	121	55	24	38	311
VANDERBILT UNIVERSITY	1920-29	5	3	9	9	1	27
	1930-39	18	8	9	29	3	67
	1940-49	10	3	10	15	7	45
6242	1950-59	52	9	39	30	9	139
	1960-61	14	2	5	6	5	32
TOTAL,	1920-61	99	25	72	89	25	310

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
ST OLAF COLLEGE	1920-29	7	4	8	3	5	27
	1930-39	25	11	15	6	5	62
	1940-49	27	16	5	10	9	67
4129	1950-59	40	11	10	[illegible]	22	111
	1960-61	15	4	2	8	5	34
TOTAL,	1920-61	114	46	40	55	46	301
CLARK UNIVERSITY	1920-29	15	7	18	5	3	48
	1930-39	17	5	15	11	5	53
	1940-49	14	9	20	3	8	54
1412	1950-59	27	18	43	16	14	118
	1960-61	3	7	10	3	1	24
TOTAL,	1920-61	76	46	106	38	31	297
CARLETON COLLEGE	1920-29	11	7	3	5	1	27
	1930-39	26	11	16	12	8	73
	1940-49	23	12	9	11	4	59
4104	1950-59	36	14	26	19	12	107
	1960-61	9	3	10	6		28
TOTAL,	1920-61	105	47	64	53	25	294
SOUTHERN METHODIST UNIV	1920-29	4		4	1		9
	1930-39	11	5	10	12	6	44
	1940-49	12	4	9	11	9	45
7436	1950-59	51	14	45	23	21	154
	1960-61	10	6	7	8	3	34
TOTAL,	1920-61	88	29	75	55	39	286
VIRGINIA POLYTECHNIC INST	1920-29	3	8	1		1	13
	1930-39	9	7	3	1	2	22
	1940-49	18	11	4	1	2	36
5436	1950-59	94	59	16	4	6	179
	1960-61	17	14	2	1	2	36
TOTAL,	1920-61	141	99	26	7	13	286
SOUTHERN ILLINOIS UNIV	1930-39	6	5	7	3	5	26
	1940-49	17	7	16	9	21	70
	1950-59	25	17	42	8	70	162
3383	1960-61	6	4	1	2	13	26
TOTAL,	1920-61	54	33	66	22	109	284
MONTANA STATE UNIVERSITY	1920-29	11	6	3	1	1	22
	1930-39	30	13	5	7	5	60
	1940-49	16	18	5	2	5	46
8108	1950-59	32	32	28	17	12	121
	1960-61	6	10	8	4	2	30
TOTAL,	1920-61	95	79	49	31	25	279
BOWDOIN COLLEGE	1920-29	3	7	8	5	2	25
	1930-39	7	10	11	19	2	49
	1940-49	17	6	9	23	4	59
1103	1950-59	36	10	23	34	9	112
	1960-61	7	3	6	12	1	29
TOTAL,	1920-61	70	36	57	93	18	274
COLORADO STATE UNIVERSITY	1920-29	2	8			2	12
	1930-39	4	21	2		2	29
	1940-49	6	18	3	1	5	33
8402	1950-59	22	107	9	3	21	162
	1960-61	9	23	2	2	1	37
TOTAL,	1920-61	43	177	16	6	31	273

Appendix 5

LEADING BACCALAUREATE SOURCES BY DECADE OF DOCTORATE, IN FIVE MAJOR FIELDS

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
CASE INSTITUTE	1920-29	9	2				11
CF TECHNCLOGY	1930-39	33	1		2	1	37
	1940-49	37					37
3109	1950-59	137	6	2		1	146
	1960-61	36	1		1		38
TOTAL,	1920-61	252	10	2	3	2	269
LAFAYETTE	1920-29	9	6	2	6	4	27
COLLEGE	1930-39	15	6	14	11	9	55
	1940-49	16	3	9	15	7	50
2330	1950-59	48	9	30	21	8	116
	1960-61	11	3	6	1		21
TOTAL,	1920-61	99	27	61	54	28	269
MCNTANA STATE	1920-29	4	5				9
COLLEGE	1930-39	17	16	1	1	1	36
	1940-49	31	20	3		3	57
8106	1950-59	66	54	7	1	12	140
	1960-61	13	9	1	2	2	27
TOTAL,	1920-61	131	104	12	4	18	269
CCLORADC STATE	1920-29		2		3	2	7
COLLEGE	1930-39	2	7	2	4	11	26
	1940-49	3	14	6	6	36	65
8405	1950-59	5	19	21	13	87	145
	1960-61			3	6	16	25
TOTAL,	1920-61	10	42	32	32	152	268
CCLLEGE AT	1920-29					2	2
ALBANY	1930-39	4	3	5	5	8	25
	1940-49	6	4	7	5	25	47
2162	1950-59	20	7	18	22	80	147
	1960-61	8	1	9	6	16	40
TOTAL,	1920-61	38	15	39	38	131	261
SAN JCSE STATE	1930-39	6	1	2	1	3	13
COLLEGE	1940-49	8	9	8	4	19	48
	1950-59	28	31	24	10	69	162
9348	1960-61	6	3	9	5	15	38
TOTAL,	1920-61	48	44	43	20	106	261
ANTIOCH CCLLEGE	1920-29				1	1	2
	1930-39	14	5	6	3	3	31
	1940-49	24	5	7	2	1	39
3102	1950-59	46	15	63	7	12	143
	1960-61	10	6	21	3	5	45
TOTAL,	1920-61	94	31	97	16	22	260
TULANE UNIV OF	1920-29	6	4	1	4		15
LOUISIANA	1930-39	9	6	5	8	1	29
	1940-49	25	5	4	5		39
7216	1950-59	48	22	43	28	6	147
	1960-61	9	4	5	8	1	27
TOTAL,	1920-61	97	41	58	53	8	257
COLGATE	1920-29	15		5	5	4	29
UNIVERSITY	1930-39	11	5	10	13	11	50
	1940-49	19	3	14	4	10	50
2115	1950-59	25	10	29	16	18	98
	1960-61	10		8	7	4	29
TOTAL,	1920-61	80	18	66	45	47	256

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
BATES COLLEGE	1920-29	3	16	5	6	5	35
	1930-39	17	15	3	8	10	53
	1940-49	14	11	8	7	9	49
1102	1950-59	25	13	17	15	28	98
	1960-61	4	4	6	3	3	20
TOTAL,	1920-61	63	59	39	39	55	255
BUCKNELL	1920-29	6	5	2	5		18
UNIVERSITY	1930-39	14	11	10	6	16	57
	1940-49	4	5	5	5	11	30
2306	1950-59	43	17	34	14	19	127
	1960-61	6	7	4	2	2	21
TOTAL,	1920-61	73	45	55	32	48	253
CCLLEGE OF	1920-29	5	2	2	4	3	16
WILLIAM & MARY	1930-39	8	5	1	10	4	28
	1940-49	12	5	5	10	11	43
5407	1950-59	39	21	31	20	22	133
	1960-61	8	5	12	1	7	33
TOTAL,	1920-61	72	38	51	45	47	253
BRYN MAWR	1920-29	5	4	15	21	2	47
COLLEGE	1930-39	8	8	27	21	2	66
	1940-49	5	3	11	20	2	41
2305	1950-59	15	9	32	25	1	82
	1960-61	3	1	6	6		16
TOTAL,	1920-61	36	25	91	93	7	252
MISSISSIPPI ST	1920-29		11	1			12
UNIVERSITY	1930-39	13	31	3	2	5	54
	1940-49	16	15	4	1	3	39
6412	1950-59	29	61	12	3	17	122
	1960-61	10	8	4	1	2	25
TOTAL,	1920-61	68	126	24	7	27	252
ALLEGHENY	1920-29	4	10	2	7	1	24
COLLEGE	1930-39	10	11	6	10	13	50
	1940-49	20	9	10	7	10	56
2302	1950-59	35	10	25	13	10	93
	1960-61	10	1	5	6	3	25
TOTAL,	1920-61	79	41	48	43	37	248
KANSAS ST TCHRS	1920-29	6		6	1	12	25
COLL EMPCRIA	1930-39	4	9	12	2	14	41
	1940-49	5	7	10	7	24	53
4711	1950-59	17	8	12	17	47	101
	1960-61	5	4		3	16	28
TOTAL,	1920-61	37	28	40	30	113	248
RADCLIFFE	1920-29	7	4	17	14	2	44
COLLEGE	1930-39	8	9	17	14	5	53
	1940-49	3	1	10	18	3	35
1448	1950-59	12	14	42	19	7	94
	1960-61	1	2	11	4	4	22
TOTAL,	1920-61	31	30	97	69	21	248
WHEATCN CCLLEGE	1920-29		1		3	2	6
ILLINOIS	1930-39	8	3	2	9	4	26
	1940-49	19	2	10	19	2	52
3391	1950-59	25	23	12	33	14	107
	1960-61	4	5	7	24	15	55
TOTAL,	1920-61	56	34	31	88	37	246

Appendix 5

LEADING BACCALAUREATE SOURCES BY DECADE OF DOCTORATE, IN FIVE MAJOR FIELDS

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
ST JOHNS	1920-29	2	1	7	11	5	26
UNIVERSITY N Y	1930-39	2		3	4	6	15
	1940-49	4	1	7	13	8	33
2183	1950-59	28	25	27	25	26	131
	1960-61	4	10	10	3	10	37
TOTAL,	1920-61	40	37	54	56	55	242
DENISON	1920-29	19	6	11	5	1	42
UNIVERSITY	1930-39	21	6	8	11	1	47
	1940-49	16	2	9	10	4	41
3122	1950-59	25	6	31	11	18	91
	1960-61	2	1	8	3	2	16
TOTAL,	1920-61	83	21	67	40	26	237
INDIANA STATE	1920-29	5	9	8	1	3	26
TEACHERS COLL	1930-39	7	7	9	5	17	45
	1940-49	1	3	4	2	19	29
3218	1950-59	4	12	17	17	64	114
	1960-61		1	3	2	15	21
TOTAL,	1920-61	17	32	41	27	118	235
UNIV OF VERMONT	1920-29	5	3	1	3	1	13
& ST AGRIC COL	1930-39	9	8	9	10	4	40
	1940-49	8	9	5	2	8	32
1309	1950-59	32	27	26	10	25	120
	1960-61	12	5	4	5	4	30
TOTAL,	1920-61	66	52	45	30	42	235
GRINNELL	1920-29	7	3	5	5	3	23
COLLEGE	1930-39	13	5	9	12	7	46
	1940-49	13	3	8	14	5	43
4210	1950-59	27	11	26	18	11	93
	1960-61	6	3	10	5	1	25
TOTAL,	1920-61	66	25	58	54	27	230
CLEMSON AGRI-	1920-29	6	22			1	29
CULTURAL COLL	1930-39	10	23	3		2	38
	1940-49	11	21	4		3	39
5708	1950-59	36	47	9	1	9	102
	1960-61	8	4	4	1	4	21
TOTAL,	1920-61	71	117	20	2	19	229
ILLINOIS STATE	1920-29	1	1	4		1	7
NORMAL UNIV	1930-39	3	5	14	2	5	29
	1940-49	3	4	8	5	23	43
3342	1950-59	13	10	23	11	64	121
	1960-61	1	1	5	5	15	27
TOTAL,	1920-61	21	21	54	23	108	227
SW MISSOURI	1920-29			2	1	3	6
STATE COLLEGE	1930-39	4	1	7	1	21	34
	1940-49	2	1	6	3	27	39
4329	1950-59	11	9	21	10	69	120
	1960-61	3	1	5	3	16	28
TOTAL,	1920-61	20	12	41	18	136	227
LOYOLA	1920-29	2			1	1	4
UNIVERSITY ILL	1930-39	4		1	6	4	15
	1940-49	7	2	12	12	7	40
3354	1950-59	32	21	31	34	9	127
	1960-61	13	6	11	5	5	40
TOTAL,	1920-61	58	29	55	58	26	226
GEORGIA INSTIT	1920-29	6					6
OF TECHNOLOGY	1930-39	13		1	2		16
	1940-49	23	2	2	1	1	29
5820	1950-59	113	3	10	4	6	136
	1960-61	32		2	4		38
TOTAL,	1920-61	187	5	15	11	7	225
UNIVERSITY OF	1920-29	8		11	7	2	28
RICHMOND	1930-39	8	5	19	12	5	49
	1940-49	18	9	18	8	5	58
5432	1950-59	22	11	24	8	3	68
	1960-61	5	4	6	4	2	21
TOTAL,	1920-61	61	29	78	39	17	224
UNIVERSITY OF	1920-29	3					3
NEW MEXICO	1930-39	3	5	4		3	15
	1940-49	8	5	13	6	5	37
8508	1950-59	36	13	48	26	12	135
	1960-61	12	1	9	4	5	31
TOTAL,	1920-61	62	24	74	36	25	221
HOPE COLLEGE	1920-29	14	10	2	4		30
	1930-39	22	12	6	3	6	49
	1940-49	24	8	2	5	3	42
3414	1950-59	32	15	7	9	14	77
	1960-61	6	3	5	4	2	20
TOTAL,	1920-61	98	48	22	25	25	218
WABASH COLLEGE	1920-29	8	10	2	5	2	27
	1930-39	15	17	6	6	4	48
	1940-49	19	6	2	11	2	40
3239	1950-59	24	18	10	17	9	78
	1960-61	7	4	2	3	3	19
TOTAL,	1920-61	73	55	22	42	20	212
HAMILTON	1920-29	2	3	2	9	2	18
COLLEGE	1930-39	13	5	9	24	4	55
	1940-49	13	5	5	13	3	39
2125	1950-59	22	7	17	27	16	89
	1960-61	3		2	4	1	10
TOTAL,	1920-61	53	20	35	77	26	211
UNIVERSITY OF	1920-29	3	1	3	5		12
SOUTH CAROLINA	1930-39	18	5	4	7	5	39
	1940-49	11	5	6	7	4	33
5727	1950-59	36	11	30	19	11	107
	1960-61	7	2	6	2	2	19
TOTAL,	1920-61	75	24	49	40	22	210
CORNELL COLLEGE	1920-29	13	2	3	4	5	27
	1930-39	15	1	9	7	10	42
	1940-49	15	5	8	9	8	45
4206	1950-59	19	9	18	9	21	76
	1960-61	2	2	3	5	6	18
TOTAL,	1920-61	64	19	41	34	50	208
MARQUETTE	1920-29	1		2	2		5
UNIVERSITY	1930-39	6	5	2	3	3	19
	1940-49	13	12	4	9	3	41
3512	1950-59	38	25	14	23	9	109
	1960-61	8	4	8	9	5	34
TOTAL,	1920-61	66	46	30	46	20	208

Appendix 5

LEADING BACCALAUREATE SOURCES BY DECADE OF DOCTORATE, IN FIVE MAJOR FIELDS

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
LAWRENCE	1920-29	10	4	7	4	4	29
COLLEGE	1930-39	17	6	13	9	9	54
	1940-49	12	3	10	4	10	39
3510	1950-59	12	11	16	12	21	72
	1960-61	2	4	2	2	3	13
TOTAL,	1920-61	53	28	48	31	47	207
TEXAS TECH	1930-39	11	2	1	2		16
COLLEGE	1940-49	15	9	4	1	3	32
	1950-59	39	25	16	20	24	124
7455	1960-61	8	13	4	3	7	35
TOTAL,	1920-61	73	49	25	26	34	207
UNIVERSITY OF	1920-29	2	2	1			5
WYOMING	1930-39	7	11	6	3	4	31
	1940-49	10	12	7	1	5	35
8301	1950-59	30	35	19	8	22	114
	1960-61	7	6	4		5	22
TOTAL,	1920-61	56	66	37	12	36	207
MIDDLEBURY	1920-29	3	6	1	3		13
COLLEGE	1930-39	9	5	5	2	2	23
	1940-49	16	13	4	11	4	48
1306	1950-59	32	6	29	16	16	99
	1960-61	8	1	4	3	7	23
TOTAL,	1920-61	68	31	43	35	29	206
GEORGE PEABODY	1920-29	1	2	7	6	12	28
COLL FOR TEACH	1930-39	3	2	15	7	29	56
	1940-49		3	4	6	26	39
6210	1950-59	1	7	13	10	30	61
	1960-61	1	4	3	2	11	21
TOTAL,	1920-61	6	18	42	31	108	205
WESTERN MICH	1920-29	1		1	2		4
UNIVERSITY	1930-39	4	1	4	1	1	11
	1940-49	2	5	8	5	11	31
3431	1950-59	14	8	20	31	52	125
	1960-61	4	2	6	6	16	34
TOTAL,	1920-61	25	16	39	45	80	205
BARNARD COLLEGE	1920-29	7	6	10	4	6	33
	1930-39	4	10	17	8	2	41
	1940-49	7	8	5			20
2118	1950-59	8	15	22	18	5	68
	1960-61	8	3	14	11	3	39
TOTAL,	1920-61	34	42	68	41	16	201
UNIVERSITY OF	1920-29	5	3	4	2	6	20
NORTH DAKOTA	1930-39	16	5	19	3	10	53
	1940-49	10	5	10	8	5	38
4410	1950-59	21	10	24	7	8	70
	1960-61	7	1	2	3	7	20
TOTAL,	1920-61	59	24	59	23	36	201
S DAKOTA ST CO	1920-29	3	8	2			13
OF AG & MECH A	1930-39	9	24	5		1	39
	1940-49	5	31	3		2	41
4508	1950-59	23	45	6	4	10	88
	1960-61	4	11	4			19
TOTAL,	1920-61	44	119	20	4	13	200

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
DAVIDSON	1920-29	4		4	3	4	15
COLLEGE	1930-39	15	5	14	10	8	52
	1940-49	14	1	10	11	3	39
5611	1950-59	24	4	18	20	8	74
	1960-61	5	1	4	7	2	19
TOTAL,	1920-61	62	11	50	51	25	199
KENT STATE	1920-29				1		1
UNIVERSITY	1930-39	2				3	5
	1940-49	5	4	6	3	8	26
3130	1950-59	17	26	40	19	31	133
	1960-61	9	3	10	3	9	34
TOTAL,	1920-61	33	33	56	26	51	199
OCCIDENTAL	1920-29	7	2	7	2	4	22
COLLEGE	1930-39	7	5	2	5	9	28
	1940-49	2	4	11	5	5	27
9336	1950-59	15	5	27	18	24	89
	1960-61	8	1	9	7	5	30
TOTAL,	1920-61	39	17	56	37	47	196
BEREA COLLEGE	1920-29	2	2	2		1	7
	1930-39	4	4	8	3	1	20
	1940-49	8	4	11	5	5	33
6102	1950-59	26	29	29	9	15	108
	1960-61	5	5	6	2	6	24
TOTAL,	1920-61	45	44	56	19	28	192
DRAKE	1920-29	4		5	8	2	19
UNIVERSITY	1930-39	9	4	6	8	6	33
	1940-49	5	5	9	9	3	31
4208	1950-59	4	14	24	12	28	82
	1960-61	1	3	8	4	9	25
TOTAL,	1920-61	23	26	52	41	48	190
UNIVERSITY OF	1920-29	3	2		1		6
AKRON	1930-39	15	1	7	5	1	29
	1940-49	14	4	7	5	2	32
3155	1950-59	31	12	26	16	13	98
	1960-61	12	1	4	5	2	24
TOTAL,	1920-61	75	20	44	32	18	189
NORTH DAKOTA	1920-29	5	6	2	1	1	15
STATE UNIV	1930-39	12	17	1		3	33
	1940-49	8	19	5	1	2	35
4402	1950-59	28	36	11	1	11	87
	1960-61	7	8	1	2	1	19
TOTAL,	1920-61	60	86	20	5	18	189
CENT MISSOURI	1920-29	2		1		3	6
STATE COLLEGE	1930-39	8	3	5	4	16	36
	1940-49	3	5	11	3	25	47
4302	1950-59	8	5	7	6	53	79
	1960-61		3	2	2	13	20
TOTAL,	1920-61	21	16	26	15	110	188
UNIVERSITY OF	1920-29	2	5	1	1		9
RHODE ISLAND	1930-39	2	10		2	2	16
	1940-49	11	18		1	2	32
1508	1950-59	24	61	8	4	10	107
	1960-61	13	9	1	1		24
TOTAL,	1920-61	52	103	10	9	14	188

Appendix 5

LEADING BACCALAUREATE SOURCES BY DECADE OF DOCTORATE, IN FIVE MAJOR FIELDS

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
UNIVERSITY OF	1920-29	1	1				2
PUERTO RICO	1930-39	2	2	2		1	7
	1940-49	9	20	6	2	9	46
9810	1950-59	15	38	20	13	22	108
	1960-61	4	4	6	1	9	24
TOTAL,	1920-61	31	65	34	16	41	187
BUTLER	1920-29	1	3		3	1	8
UNIVERSITY	1930-39	9	20	4	9	6	48
	1940-49	8	6	10	9	2	35
3204	1950-59	13	14	8	18	21	74
	1960-61	1	3	7	3	6	20
TOTAL,	1920-61	32	46	29	42	36	185
KALAMAZOO	1920-29	20	4	1	3		28
COLLEGE	1930-39	17	7	5	2	5	36
	1940-49	24	12	2	3	3	44
3415	1950-59	28	15	4	4	6	57
	1960-61	8	4	4	3		19
TOTAL,	1920-61	97	42	16	15	14	184
KANSAS ST COLL	1930-39	2	4	5	3	11	25
PITTSBURG	1940-49	3	8	4	4	21	40
	1950-59	13	10	13	6	62	104
4712	1960-61	2	1	1	3	8	15
TOTAL,	1920-61	20	23	23	16	102	184
DICKINSON	1920-29	4	2	4	4	3	17
COLLEGE	1930-39	8	2	9	18	12	49
	1940-49	8	1	8	15	12	44
2313	1950-59	10	8	20	11	13	62
	1960-61	3	1	4		3	11
TOTAL,	1920-61	33	14	45	48	43	183
UNIVERSITY OF	1930-39		1	2	1		4
MIAMI	1940-49	3	3	5	2		13
	1950-59	26	29	36	20	14	125
5911	1960-61	9	10	12	5	3	39
TOTAL,	1920-61	38	43	55	28	17	181
SAN DIEGO STATE	1930-39	2		2		2	6
COLLEGE	1940-49	3	2	5	6	6	22
	1950-59	19	31	27	10	30	117
9344	1960-61	2	4	14	8	7	35
TOTAL,	1920-61	26	37	48	24	45	180
UNIVERSITY OF	1920-29	2			3		5
LOUISVILLE	1930-39	10	2	1	6		19
	1940-49	18	2	5	1	2	28
6125	1950-59	37	9	25	16	8	95
	1960-61	12	4	6	6	4	32
TOTAL,	1920-61	79	17	37	32	14	179
BELOIT COLLEGE	1920-29	3	3	8	4	1	19
	1930-39	14	6	15	5	3	43
	1940-49	14	8	12	3	2	39
3503	1950-59	23	9	15	7	7	61
	1960-61	7	5	2	1		15
TOTAL,	1920-61	61	31	52	20	13	177
HOWARD	1920-29		1	1	5		7
UNIVERSITY	1930-39	6	6	4	5	4	25
	1940-49	2	7	19	6	14	48
5309	1950-59	15	12	26	7	25	85
	1960-61	3		3	3	2	11
TOTAL,	1920-61	26	26	53	26	45	176
LONG ISLAND	1930-39		1	1			2
UNIVERSITY	1940-49	3	8	4		1	16
	1950-59	19	36	38	4	35	132
2138	1960-61	1	4	12	3	4	24
TOTAL,	1920-61	23	49	55	7	40	174
EASTERN MICHI-	1920-29	9	2		1	6	18
GAN UNIV	1930-39	9	6	3	2	17	37
	1940-49	7	5	7	3	11	33
3419	1950-59	9	5	9	5	44	72
	1960-61				4	8	12
TOTAL,	1920-61	34	18	19	15	86	172
BIRMINGHAM-SOUT	1920-29	1		1	1		3
HERN COLL	1930-39	1	3	6	9	3	22
	1940-49	12	2	8	5	4	31
6310	1950-59	18	9	28	20	19	94
	1960-61	5	1	4	6	5	21
TOTAL,	1920-61	37	15	47	41	31	171
GETTYSBURG	1920-29	8	3	8		3	22
COLLEGE	1930-39	5	3	5	10	3	26
	1940-49	16	3	8	9	8	44
2321	1950-59	19	8	11	13	12	63
	1960-61	7	2	3	3	1	16
TOTAL,	1920-61	55	19	35	35	27	171
UNIVERSITY OF	1920-29	3		1	1		5
REDLANDS	1930-39	2	4	5	4	1	16
	1940-49	4	2	6	4	9	25
9357	1950-59	15	4	27	21	27	94
	1960-61	3	1	6	14	7	31
TOTAL,	1920-61	27	11	45	44	44	171
CALVIN COLLEGE	1920-29				5		5
	1930-39	4	8	3	10		25
	1940-49	14	4	5	14	6	43
3405	1950-59	24	7	15	18	8	72
	1960-61	8	5	2	6	3	24
TOTAL,	1920-61	50	24	25	53	17	169
GEORGETOWN	1920-29	1	2	4	6	1	14
UNIVERSITY	1930-39	4	4	4	12		24
	1940-49	3	1	12	4	2	22
5308	1950-59	18	10	37	22	2	89
	1960-61	4	2	8	5	1	20
TOTAL,	1920-61	30	19	65	49	6	169
MUHLENBERG	1920-29	1	3	4	7	1	16
COLLEGE	1930-39	4	4	6	6	8	28
	1940-49	10	3	2	13	6	34
2344	1950-59	22	13	13	17	8	73
	1960-61	7	3	3	5		18
TOTAL,	1920-61	44	26	28	48	23	169

Appendix 5

LEADING BACCALAUREATE SOURCES BY DECADE OF DOCTORATE, IN FIVE MAJOR FIELDS

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
NEBRASKA WESLEYAN UNIVERSITY	1920-29	2	8		3	3	16
	1930-39	11	9	14	4	8	46
	1940-49	7	9	7	5	11	39
4615	1950-59	12	4	15	6	19	56
	1960-61	2	1	1		7	11
TOTAL,	1920-61	34	31	37	18	48	168
COLORADO COLLEGE	1920-29	8	7	4	7		26
	1930-39	13	14	8	6	2	43
	1940-49	11	4	2	6	3	26
8403	1950-59	14	10	19	15	5	63
	1960-61	2	2	4		1	9
TOTAL,	1920-61	48	37	37	34	11	167
ALBION COLLEGE	1920-29	11	1	10	8	3	33
	1930-39	10	8	5	10	7	40
	1940-49	8	3	7	3	2	23
3402	1950-59	8	9	7	17	16	57
	1960-61	1	3	1	1	6	12
TOTAL,	1920-61	38	24	30	39	34	165
GOUCHER COLLEGE	1920-29	9	15	12	5	4	45
	1930-39	12	17	6	12	6	53
	1940-49	3	13	4	4	3	27
5204	1950-59	8	8	9	5	6	36
	1960-61	1	1		2		4
TOTAL,	1920-61	33	54	31	28	19	165
KNOX COLLEGE	1920-29	6	5	9	2	2	24
	1930-39	16	5	5	5	4	35
	1940-49	13	5	7	9	5	39
3347	1950-59	18	3	15	3	11	50
	1960-61	5	1	4	2	2	14
TOTAL,	1920-61	58	19	40	21	24	162
JUNIATA COLLEGE	1920-29	2		4	1	1	8
	1930-39	7	2	3	5	4	21
	1940-49	20	2	3	6	10	41
2327	1950-59	32	8	12	7	24	83
	1960-61	3	2	1	1	1	8
TOTAL,	1920-61	64	14	23	20	40	161
SPRINGFIELD COLLEGE	1920-29		1	6	1	1	9
	1930-39		1	6	1	19	27
	1940-49		6	7		21	34
1452	1950-59		3	11	2	57	73
	1960-61		1	2	1	14	18
TOTAL,	1920-61		12	32	5	112	161
WAKE FOREST COLLEGE	1920-29	3		7	5		15
	1930-39	8	1	7	7	3	26
	1940-49	8	4	8	6		26
5642	1950-59	19	11	11	19	12	72
	1960-61	5	5	4	2	6	22
TOTAL,	1920-61	43	21	37	39	21	161
TRINITY COLLEGE CONNECTICUT	1920-29	5	1	1	6		13
	1930-39	7	1	2	4		14
	1940-49	12	3	5	11	3	34
1613	1950-59	29	7	15	14	11	76
	1960-61	12	3	3	4	1	23
TOTAL,	1920-61	65	15	26	39	15	160

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
MANHATTAN COLLEGE	1920-29			1	6	1	8
	1930-39	2		2	11	4	19
	1940-49	10	2	8	6	4	30
2140	1950-59	26	8	9	8	17	68
	1960-61	17	5	5	5	2	34
TOTAL,	1920-61	55	15	25	36	28	159
PARK COLLEGE	1920-29	10	1	4	4	5	24
	1930-39	10	7	8	13	4	42
	1940-49	10	4	7	8	5	34
4325	1950-59	13	4	8	10	12	47
	1960-61	1	1	2	4	4	12
TOTAL,	1920-61	44	17	29	39	30	159
AUGUSTANA COLLEGE ILL	1920-29	4	1	2	1	3	11
	1930-39	6	4	9	3	6	28
	1940-49	15	4	5	2	3	29
3307	1950-59	31	6	12	11	9	69
	1960-61	8	2	7		3	20
TOTAL,	1920-61	64	17	35	17	24	157
DEPAUL UNIVERSITY	1920-29				3		3
	1930-39	4	1	1	6	4	16
	1940-49	4	2	10	18	4	38
3329	1950-59	28	10	11	19	13	81
	1960-61	7	1	4	4	2	18
TOTAL,	1920-61	43	14	26	50	23	156
MANCHESTER COLLEGE	1920-29	3		4	1		8
	1930-39	12	3	6	5	6	32
	1940-49	14	4	9	6	3	36
3222	1950-59	19	6	11	15	19	70
	1960-61	2		3		5	10
TOTAL,	1920-61	50	13	33	27	33	156
NE MISSOURI ST TEACHERS COLL	1920-29	2	1	2			5
	1930-39	8	5	8	5	12	38
	1940-49	7	5	4	3	23	42
4322	1950-59	8	4	13	6	31	62
	1960-61	1		2	2	4	9
TOTAL,	1920-61	26	15	29	16	70	156
WASHINGTON & LEE UNIVERSITY	1920-29	3		9	7		19
	1930-39	7	3	10	10	4	34
	1940-49	3	4	11	7	3	28
5441	1950-59	22	3	20	14	2	61
	1960-61	4		5	4	1	14
TOTAL,	1920-61	39	10	55	42	10	156
COOPER UNION	1920-29	4	1				5
	1930-39	11	1				12
	1940-49	29					29
2119	1950-59	76	4	4	1		85
	1960-61	24					24
TOTAL,	1920-61	144	6	4	1		155
STATE UNIV OF SOUTH DAKOTA	1920-29	7	4	3	1		15
	1930-39	15	5	3	5	5	33
	1940-49	8	6	8	5	2	29
4511	1950-59	20	6	13	12	10	61
	1960-61	2	4	5	3	3	17
TOTAL,	1920-61	52	25	32	26	20	155

Appendix 5

LEADING BACCALAUREATE SOURCES BY DECADE OF DOCTORATE, IN FIVE MAJOR FIELDS

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
TEXAS CHRISTIAN	1920-29	1	3	3		1	8
UNIVERSITY	1930-39	7	4	11	4	2	28
	1940-49	8	2	3	7	6	26
7450	1950-59	17	6	13	25	14	75
	1960-61	5	2	4	3	3	17
TOTAL,	1920-61	38	17	34	39	26	154
NORTHEASTERN	1920-29	1					1
UNIVERSITY	1930-39	3		1	1	2	7
	1940-49	10		1		3	14
1440	1950-59	53	18	24	4	5	104
	1960-61	14	2	9		3	28
TOTAL,	1920-61	81	20	35	5	13	154
WILLAMETTE	1920-29	1		2	1	1	5
UNIVERSITY	1930-39	6	5	5	5	5	26
	1940-49	14	1	10	8	5	38
9220	1950-59	17	4	15	11	23	70
	1960-61	5	3	4	1	2	15
TOTAL,	1920-61	43	13	36	26	36	154
UNIVERSITY OF	1920-29	1		1			2
HAWAII	1930-39	1	6	3	2		12
	1940-49	3	7	4	2	5	21
9501	1950-59	19	34	16	8	16	93
	1960-61	8	8	5	1	3	25
TOTAL,	1920-61	32	55	29	13	24	153
YESHIVA	1920-29				1		1
UNIVERSITY	1930-39				2		2
	1940-49	3	1	4	12	3	23
2199	1950-59	17	7	26	25	16	91
	1960-61	10		13	9	4	36
TOTAL,	1920-61	30	8	43	49	23	153
EARLHAM COLLEGE	1920-29	6	6	12	3	2	29
	1930-39	11	11	6	11	3	42
	1940-49	4	8	6	4	1	23
3208	1950-59	8	13	14	8	5	48
	1960-61	1	4	1	3	1	10
TOTAL,	1920-61	30	42	39	29	12	152
UNIVERSITY OF	1920-29	5	3	1	2		11
MISSISSIPPI	1930-39	10	4	11	9	5	39
	1940-49	7	2	12	3	4	28
6417	1950-59	20	6	22	11	5	64
	1960-61	2		5	1	2	10
TOTAL,	1920-61	44	15	51	26	16	152
BOWLING GREEN	1920-29			2			2
ST UNIVERSITY	1930-39	1		3	1	3	8
	1940-49	5		1		1	7
3104	1950-59	23	10	22	16	29	100
	1960-61	8	4	8	4	9	33
TOTAL,	1920-61	37	14	36	21	42	150
COE COLLEGE	1920-29	10	2	4		5	21
	1930-39	10	4	9	4	6	33
	1940-49	13	7	1	4	4	29
4205	1950-59	13	4	19	7	15	58
	1960-61	3	2	2		2	9
TOTAL,	1920-61	49	19	35	15	32	150
COLLEGE OF THE	1920-29				4	1	5
HOLY CROSS	1930-39	3	3	8	8	5	27
	1940-49	5	7	4	2	2	20
1413	1950-59	32	8	11	19	10	80
	1960-61	5	3	3	5	2	18
TOTAL,	1920-61	45	21	26	38	20	150
LEBANON VALLEY	1920-29	4	8	4	2	3	21
COLLEGE	1930-39	7	6	3	6	5	27
	1940-49	9	6	2	2	7	26
2331	1950-59	25	5	4	8	17	59
	1960-61	6	4	3	1	3	17
TOTAL,	1920-61	51	29	16	19	35	150
MUSKINGUM	1920-29	4	1	6	1	3	15
COLLEGE	1930-39	16	3	7	6	5	37
	1940-49	9	2	8	5	9	33
3138	1950-59	9	5	8	14	20	56
	1960-61	2	2	1	1	2	8
TOTAL,	1920-61	40	13	30	27	39	149
SE MISSOURI	1920-29	1		2		2	5
STATE COLLEGE	1930-39	4	4			11	19
	1940-49	3	3	8	3	12	29
4327	1950-59	23	4	7	8	35	77
	1960-61	8	1		2	7	18
TOTAL,	1920-61	39	12	17	13	67	148
UNIVERSITY OF	1920-29	2	1		1	1	5
DAYTON	1930-39	9	1	1	4	2	17
	1940-49	8		5	7	3	23
3154	1950-59	32	13	13	13	8	79
	1960-61	8	1	5	6	3	23
TOTAL,	1920-61	59	16	24	31	17	147
UNIVERSITY OF	1920-29	3	1	1		2	7
DELAWARE	1930-39	3		1	3	1	8
	1940-49	3	7	4	2	2	18
5103	1950-59	38	22	15	13	6	94
	1960-61	6	9	1		2	18
TOTAL,	1920-61	53	39	22	18	13	145
WESTERN KY	1920-29			2			2
STATE COLLEGE	1930-39	4	3	3		1	11
	1940-49	5	6	6	1	13	31
6129	1950-59	26	14	14	9	19	82
	1960-61	3	3	4	3	6	19
TOTAL,	1920-61	38	26	29	13	39	145
ROOSEVELT	1930-39			1			1
UNIVERSITY	1940-49	1			1	1	3
	1950-59	19	16	47	16	4	102
3377	1960-61	6	8	13	7	4	38
TOTAL,	1920-61	26	24	61	24	9	144
FURMAN	1920-29	2	2	1	4		9
UNIVERSITY	1930-39	10	6	6	14	5	41
	1940-49	10	5	3	11	5	34
5718	1950-59	5	4	14	12	11	46
	1960-61	2	2	2	4	3	13
TOTAL,	1920-61	29	19	26	45	24	143

Appendix 5

LEADING BACCALAUREATE SOURCES BY DECADE OF DOCTORATE, IN FIVE MAJOR FIELDS

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
NORTH CENTRAL COLLEGE	1920-29	2	4		2	1	9
	1930-39	9	8	6	9	4	36
	1940-49	9	3		8	4	24
3365	1950-59	8	16	14	10	9	57
	1960-61	3	4	5	4	1	17
	TOTAL, 1920-61	31	35	25	33	19	143
WASHINGTON & JEFFERSON COL	1920-29	4	1		1	1	7
	1930-39	10	2	7	9	4	32
	1940-49	15	4	3	7	4	33
2391	1950-59	27	4	7	5	14	57
	1960-61	7	1	2	3	1	14
	TOTAL, 1920-61	63	12	19	25	24	143
COLLEGE AT BUFFALO	1920-29				1		1
	1930-39					2	2
	1940-49		2	4		7	13
2148	1950-59	3	2	15	3	88	111
	1960-61			1	2	12	15
	TOTAL, 1920-61	3	4	20	6	109	142
MONMOUTH COLLEGE ILL	1920-29	5	2	2	3	1	13
	1930-39	15	3	4	5	3	30
	1940-49	25	8	2	6	5	46
3360	1950-59	21	5	5	4	4	39
	1960-61	4	2	1	1	4	12
	TOTAL, 1920-61	70	20	14	19	17	140
ALFRED UNIVERSITY	1920-29	2	4	3	3	1	13
	1930-39	4		1		4	9
	1940-49	20	2	1	4	4	31
2102	1950-59	35	8	5	3	14	65
	1960-61	13	3	1	1	3	21
	TOTAL, 1920-61	74	17	11	11	26	139
GONZAGA UNIVERSITY	1920-29	1			1		2
	1930-39	5	1	8	9	3	26
	1940-49	5	2	10	12	2	31
9104	1950-59	12	1	25	16	8	62
	1960-61	3	1	8	6		18
	TOTAL, 1920-61	26	5	51	44	13	139
WHITMAN COLLEGE	1920-29	7	1		5	2	15
	1930-39	8	5	8	6	4	31
	1940-49	11	5	4	6	8	34
9116	1950-59	21	3	10	8	7	49
	1960-61	1	1	3	1	4	10
	TOTAL, 1920-61	48	15	25	26	25	139
UNIVERSITY OF WICHITA	1920-29	1	1				2
	1930-39	6	1	4		1	12
	1940-49	14	7	3	2	4	30
4718	1950-59	21	5	19	15	19	79
	1960-61	1	2	3	6	3	15
	TOTAL, 1920-61	43	16	29	23	27	138
MARYVILLE COLLEGE TENN	1920-29	3			2		5
	1930-39	5	3	7	2	6	23
	1940-49	9	5	11	11	7	43
6221	1950-59	4	10	8	17	10	49
	1960-61	2	2	2	6	4	16
	TOTAL, 1920-61	23	20	28	38	27	136
URSINUS COLLEGE	1920-29	3	1	1	2	3	10
	1930-39	2	4	6	6	8	26
	1940-49	6	6	6	3	7	28
2387	1950-59	23	5	14	9	11	62
	1960-61	1	3	2	2	2	10
	TOTAL, 1920-61	35	19	29	22	31	136
FLORIDA STATE UNIVERSITY	1920-29		2			2	4
	1930-39		1	5	1	2	9
	1940-49		4	5	2	4	15
5907	1950-59	9	6	21	14	20	70
	1960-61	5		10	10	11	36
	TOTAL, 1920-61	14	13	41	27	39	134
HAMLINE UNIV	1920-29	4	2	4	2	5	17
	1930-39	7	2	4	3	4	20
	1940-49	7	3	5	5	6	26
4114	1950-59	9	3	25	9	10	56
	1960-61	4	1	4	4	2	15
	TOTAL, 1920-61	31	11	42	23	27	134
WITTENBERG UNIVERSITY	1920-29	2	3	4	3	1	13
	1930-39	7	3	11	7	4	32
	1940-49	11	5	5	5	6	32
3163	1950-59	8	4	15	9	10	46
	1960-61	2	1	1	1	6	11
	TOTAL, 1920-61	30	16	36	25	27	134
UNIVERSITY OF DETROIT	1920-29				1		1
	1930-39	3	1	2	3		9
	1940-49	8	2	2	4	2	18
3429	1950-59	32	9	13	5	7	66
	1960-61	13	9	6	9	2	39
	TOTAL, 1920-61	56	21	23	22	11	133
CENTRAL METHOD COLLEGE	1920-29	2	2		1	6	11
	1930-39	15	7	2	5	6	35
	1940-49	26	3	5	3	4	41
4301	1950-59	13	4	2	12	5	36
	1960-61	5			1	3	9
	TOTAL, 1920-61	61	16	9	22	24	132
U S MILITARY ACADEMY	1920-29	1			2		3
	1930-39	4		3		1	8
	1940-49	8		4			12
2190	1950-59	40		27	4	7	78
	1960-61	19		10	1		30
	TOTAL, 1920-61	72		44	7	8	131
WORCESTER POLY-TECHNIC INST	1920-29	12	1				13
	1930-39	12	1			1	14
	1940-49	22	2	1			25
1464	1950-59	57	5	2	1	1	66
	1960-61	12		1			13
	TOTAL, 1920-61	115	9	4	1	2	131
BALL STATE TEACHERS COLL	1930-39	3	2	1		1	7
	1940-49	3	1	3		10	17
	1950-59	7	5	11	8	51	82
3203	1960-61	1		4		19	24
	TOTAL, 1920-61	14	8	19	8	81	130

Appendix 5

LEADING BACCALAUREATE SOURCES BY DECADE OF DOCTORATE, IN FIVE MAJOR FIELDS

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
DUQUESNE	1920-29			1	1		2
UNIVERSITY	1930-39			1	6	1	8
	1940-49	4	2	4	2	6	18
2316	1950-59	28	12	13	10	21	84
	1960-61	2	6	3	2	4	17
TOTAL,	1920-61	34	20	22	21	32	129
HIRAM COLLEGE	1920-29	6	2	2	3	3	16
	1930-39	13	2	7	2	4	28
	1940-49	13	5	3	7	4	32
3128	1950-59	13	4	13	7	8	45
	1960-61	2	1		3	1	7
TOTAL,	1920-61	47	14	25	22	20	128
PHILADELPHIA CO	1920-29	2					2
OF PHARM & SCI	1930-39	9	7				16
	1940-49	7	15				22
2365	1950-59	24	47			2	73
	1960-61	3	11		1		15
TOTAL,	1920-61	45	80		1	2	128
LUTHER COLLEGE	1920-29	1	1	6	3	1	12
	1930-39	5	2	9	4	3	23
	1940-49	12	11	1	4	3	31
4216	1950-59	12	7	7	9	13	48
	1960-61	6	3	1	2	1	13
TOTAL,	1920-61	36	24	24	22	21	127
SOUTHWESTERN	1920-29	6	9	2	4		21
COLLEGE	1930-39	11	12	4	2	1	30
	1940-49	7	2	6	2	6	23
4720	1950-59	10	4	8	7	16	45
	1960-61		2			6	8
TOTAL,	1920-61	34	29	20	15	29	127
HOBART & WM	1920-29	1	1	3	4		9
SMITH COLLEGES	1930-39	7	3	2	5		17
	1940-49	6	8	3	2	4	23
2112	1950-59	17	11	20	10	9	67
	1960-61	1	1	2	3	3	10
TOTAL,	1920-61	32	24	30	24	16	126
MARIETTA	1920-29	3	1	1			5
COLLEGE	1930-39	17	4	4	3	3	31
	1940-49	6	3	3	2	3	17
3133	1950-59	17	18	9	5	9	58
	1960-61	4	3	3	4	1	15
TOTAL,	1920-61	47	29	20	14	16	126
UNIV OF CALIF	1930-39			1			1
SANTA BARBARA	1940-49	1	1	5	4	9	20
	1950-59	3	13	16	12	37	81
9368	1960-61	3	4	7	3	6	23
TOTAL,	1920-61	7	18	29	19	52	125
UNIVERSITY OF	1920-29			1		1	2
TOLEDO	1930-39	9		3		3	15
	1940-49	13	6	5	4	4	32
3157	1950-59	17	20	12	8	9	66
	1960-61	2	3	1	3	1	10
TOTAL,	1920-61	41	29	22	15	18	125
EASTERN ILL	1920-29			1			1
UNIVERSITY	1930-39		2	1		1	4
	1940-49	3	7	3	4	7	24
3330	1950-59	10	18	11	12	29	80
	1960-61	2	3		3	6	14
TOTAL,	1920-61	15	30	16	19	43	123
BAKER	1920-29	6		5	4	3	18
UNIVERSITY	1930-39	5	2	10	8	8	33
	1940-49	6	3	4	9	8	30
4701	1950-59	3	1	5	12	9	30
	1960-61	5	1	3		2	11
TOTAL,	1920-61	25	7	27	33	30	122
WILLIAM JEWELL	1920-29	4		1	4	2	11
COLLEGE	1930-39	15	3	4	7	5	34
	1940-49	10		2	4	6	22
4343	1950-59	11	3	12	10	10	46
	1960-61	1	1	4	1	1	8
TOTAL,	1920-61	41	7	23	26	24	121
U S NAVAL	1920-29	3	1		1		5
ACADEMY	1930-39	3		2		3	8
	1940-49	2	1	4	2	1	10
5224	1950-59	41	2	10	4	7	64
	1960-61	23		2	5	3	33
TOTAL,	1920-61	72	4	18	12	14	120
KENYON COLLEGE	1920-29	2			1		3
	1930-39	9	4		6	1	20
	1940-49	12	1	3	4		20
3131	1950-59	11	8	13	22	3	57
	1960-61	7		3	9		19
TOTAL,	1920-61	41	13	19	42	4	119
BRADLEY	1920-29					1	1
UNIVERSITY	1930-39	2		1	2		5
	1940-49	7	3	3	1	5	19
3310	1950-59	25	7	9	8	17	66
	1960-61	14	1	8	2	2	27
TOTAL,	1920-61	48	11	21	13	25	118
MOUNT UNION	1920-29	5	2	2	3		12
COLLEGE	1930-39	12	7	1	5	4	29
	1940-49	15	2	1	1	8	27
3137	1950-59	14	4	3	7	9	37
	1960-61	4	1	2	2	4	13
TOTAL,	1920-61	50	16	9	18	25	118
WOFFORD COLLEGE	1920-29			2	6	3	11
	1930-39	6		2	11	2	21
	1940-49	4	3	4	10	5	26
5730	1950-59	14	2	9	15	13	53
	1960-61	2	1	2		2	7
TOTAL,	1920-61	26	6	19	42	25	118
CREIGHTON	1920-29			1	3		4
UNIVERSITY	1930-39	7	5	10	10	3	35
	1940-49	6	2	3	4	3	18
4603	1950-59	10	13	9	6	6	44
	1960-61	4	3	2	6	1	16
TOTAL,	1920-61	27	23	25	29	13	117

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LEADING BACCALAUREATE SOURCES BY DECADE OF DOCTORATE, IN FIVE MAJOR FIELDS

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
FRESNO STATE COLLEGE	1930-39	1	1	2	2		6
	1940-49	3	2	9	2	10	26
	1950-59	16	11	15	7	15	64
9318	1960-61	5	4		3	8	20
	TOTAL, 1920-61	25	18	26	14	33	116
BALDWIN-WALLACE COLLEGE	1920-29	5	1	7		2	15
	1930-39	4	1	2	7	3	17
	1940-49	6	1	6	7	2	22
3105	1950-59	12	5	11	12	8	48
	1960-61	2	2	4	2	3	13
	TOTAL, 1920-61	29	10	30	28	18	115
NORTHERN ILL UNIVERSITY	1930-39		2	1		2	5
	1940-49		8	2		9	19
	1950-59	7	13	11	7	35	73
3367	1960-61	2	2	2	1	10	17
	TOTAL, 1920-61	9	25	16	8	56	114
VALPARAISO UNIVERSITY	1920-29	10	4	4	5	6	29
	1930-39	3	3	5		7	18
	1940-49	2	1	3	1	3	10
3236	1950-59	14	9	11	6	7	47
	1960-61	4	1	1	3		9
	TOTAL, 1920-61	33	18	24	15	23	113
CENTRAL MICHIGAN UNIV	1920-29			1			1
	1930-39	2	1		1	3	7
	1940-49	3	2	2	2	8	17
3407	1950-59	1	2	14	13	35	65
	1960-61	1	3	3	2	13	22
	TOTAL, 1920-61	7	8	20	18	59	112
COLBY COLLEGE	1920-29	3	2	1	3	3	12
	1930-39	4	3	4	3	4	18
	1940-49	9	2	3	10	6	30
1104	1950-59	6	1	11	10	11	39
	1960-61	1		5	3	4	13
	TOTAL, 1920-61	23	8	24	29	28	112
DREW UNIVERSITY	1920-29					1	1
	1930-39	1			1		2
	1940-49	4	1		6		11
2230	1950-59	23	17	23	7	11	81
	1960-61	7	1	4	5		17
	TOTAL, 1920-61	35	19	27	19	12	112
ST LAWRENCE UNIVERSITY	1920-29		1		1	1	3
	1930-39	2	2		2	3	9
	1940-49	5	3	6	2	8	24
2186	1950-59	23	9	14	3	17	66
	1960-61	7	1	2			10
	TOTAL, 1920-61	37	16	22	8	29	112
WASHBURN UNIV OF TOPEKA	1920-29	5	3	4	1	2	15
	1930-39	2	5	6	3	5	21
	1940-49	5	2	4	3	7	21
4728	1950-59	8	5	10	12	12	47
	1960-61	1		4		3	8
	TOTAL, 1920-61	21	15	28	19	29	112
MISSISSIPPI COLLEGE	1920-29	4	1	4	2	1	12
	1930-39	17	6	4	3	4	34
	1940-49	14	2	2	2	1	21
6409	1950-59	9	2	9	9	8	37
	1960-61	2	1	2	1	1	7
	TOTAL, 1920-61	46	12	21	17	15	111
GROVE CITY COLLEGE	1920-29	2	1	1	1	3	8
	1930-39	7	2	3	1	6	19
	1940-49	19	1	1	4	10	35
2322	1950-59	7	6		3	20	36
	1960-61	5	1		3	3	12
	TOTAL, 1920-61	40	11	5	12	42	110
HASTINGS COLLEGE	1920-29	2		2			4
	1930-39	7		4	2	4	17
	1940-49	3	4	7	4	8	26
4607	1950-59	12	4	12	7	16	51
	1960-61	2	1	2	4	2	11
	TOTAL, 1920-61	26	9	27	17	30	109
CANISIUS COLLEGE	1920-29	1		1	2	1	5
	1930-39	5	1	5	3	1	15
	1940-49	9	3	3	4	2	21
2107	1950-59	30	3	6	4	11	54
	1960-61	8	1			4	13
	TOTAL, 1920-61	53	8	15	13	19	108
OTTERBEIN COLLEGE	1920-29	4	5	2	3	1	15
	1930-39	9	5	7	5	6	32
	1940-49	5	4	1	1	9	20
3145	1950-59	4	7	8	7	8	34
	1960-61	1	2		3	1	7
	TOTAL, 1920-61	23	23	18	19	25	108
UNIVERSITY OF SCRANTON	1930-39				4		4
	1940-49	7	7	3	1	3	21
	1950-59	28	22	11	7	4	72
2386	1960-61	2	6		2	1	11
	TOTAL, 1920-61	37	35	14	14	8	108
VILLANOVA UNIVERSITY	1920-29		1	2	1		4
	1930-39	3	2	3	5	2	15
	1940-49	12	5	5	6	1	29
2389	1950-59	25	5	3	6	3	42
	1960-61	11	2		3	2	18
	TOTAL, 1920-61	51	15	13	21	8	108
EAST TEXAS ST COLLEGE	1920-29				2		2
	1930-39			2	5	9	16
	1940-49	1	1	4	3	11	20
7415	1950-59	10	4	8	9	28	59
	1960-61	4	1	1	1	3	10
	TOTAL, 1920-61	15	6	15	20	51	107
GENEVA COLLEGE	1920-29		1	2	2		5
	1930-39	6	3	6	1	3	19
	1940-49	8	6	6	2	11	33
2320	1950-59	8	4	8	5	17	42
	1960-61	3	1		1	3	8
	TOTAL, 1920-61	25	15	22	11	34	107

Appendix 5

LEADING BACCALAUREATE SOURCES BY DECADE OF DOCTORATE, IN FIVE MAJOR FIELDS

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
ILL WESLEYAN	1920-29	4	4	1		1	10
UNIVERSITY	1930-39	14	2	5	2	2	25
	1940-49	5	1	3	3	4	16
3343	1950-59	8	7	9	13	9	46
	1960-61	2			4	2	8
TOTAL,	1920-61	33	14	18	22	18	105
MACALESTER	1920-29	2	3	2	1		8
COLLEGE	1930-39	8	6	3	6	3	26
	1940-49	2	4	5	2	3	16
4116	1950-59	14	6	8	10	6	44
	1960-61	1	1	4	5		11
TOTAL,	1920-61	27	20	22	24	12	105
SAN FRANCISCO	1930-39		1			1	2
STATE COLLEGE	1940-49	1		3		10	14
	1950-59	1	4	15	7	49	76
9346	1960-61	1	2	2	2	6	13
TOTAL,	1920-61	3	7	20	9	66	105
SW TEXAS STATE	1920-29			1			1
COLLEGE	1930-39	4	2	3	2	3	14
	1940-49	7	7	5	1	13	33
7440	1950-59	7	6	2	4	23	42
	1960-61	1	3	3	3	5	15
TOTAL,	1920-61	19	18	14	10	44	105
COLLEGE OF	1920-29				1		1
ST THOMAS	1930-39		1		3	1	5
	1940-49	19	4	1	2	2	28
4109	1950-59	30	14	10	2	4	60
	1960-61	5	1	2	1	1	10
TOTAL,	1920-61	54	20	13	9	8	104
MONTCLAIR	1930-39					1	1
STATE COLLEGE	1940-49	2	1	3	1	4	11
	1950-59	4	7	6	12	47	76
2217	1960-61		1	3	1	11	16
TOTAL,	1920-61	6	9	12	14	63	104
UNIV OF S WEST	1930-39	2	3	1	2	1	9
LOUISIANA	1940-49	2	11	1	1	3	18
	1950-59	16	22	6	6	11	61
7215	1960-61	3	5	1	3	2	14
TOTAL,	1920-61	23	41	9	12	17	102
DRURY COLLEGE	1920-29	1	1	3	1	2	8
	1930-39	7	3	3	6	2	21
	1940-49	6	2	2	5	5	20
4310	1950-59	10	6	6	6	14	42
	1960-61	1		7		2	10
TOTAL,	1920-61	25	12	21	18	25	101
FORT HAYS	1930-39	2	2	2		2	8
KANSAS ST COLL	1940-49	5	1	12	1	6	25
	1950-59	10	12	17	5	17	61
4709	1960-61		4	1	1	1	7
TOTAL,	1920-61	17	19	32	7	26	101
MISSOURI SCHOOL	1920-29	5					5
OF MINES & MET	1930-39	10	1				11
	1940-49	10					10
4345	1950-59	56	3				59
	1960-61	14	1				15
TOTAL,	1920-61	95	5				100
RANDOLPH MACON	1920-29	8		3	4		15
COLLEGE	1930-39	8	1	2	7	4	22
	1940-49	4	2	3	5	3	17
5423	1950-59	20	2	8	7	3	40
	1960-61	4	1	1			6
TOTAL,	1920-61	44	6	17	23	10	100
GRAND TOTAL	1920-29	2953	1941	2056	1732	883	9565
ALL INSTITU-	1930-39	6258	4215	4131	3793	2428	20825
TIONS	1940-49	7940	4727	4413	3702	3415	24197
	1950-59	19858	11153	14108	8225	9344	62688
	1960-61	4777	2500	3350	2171	2144	14942
TOTAL,	1920-61	41786	24536	28058	19623	18214	132217

Appendix 6

LEADING BACCALAUREATE SOURCES, 1920-1961 DOCTORATES IN PHYSICAL AND BIOLOGICAL SCIENCES

	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat.,Cytol.,Embryol.	Physiology & Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology & Entomology	Biosciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
UNIV OF CALIFORNIA BERK 9356	131	325	519	104	207	1286	91	26	14	150	124	145	82	237	72	941	2227
CITY COLLEGE OF NEW YORK 2188	142	213	561	45	177	1138	4	15	10	41	125	22	75	54	24	370	1508
UNIVERSITY OF ILLINOIS 3388	70	98	721	66	315	1270	168	35	9	104	104	59	92	115	31	717	1987
UNIVERSITY OF CHICAGO 3387	158	233	429	118	19	957	10	25	35	126	88	69	39	66	19	477	1434
UNIVERSITY OF WISCONSIN 3527	47	108	370	74	192	791	173	44	10	102	148	108	95	140	36	856	1647
HARVARD UNIVERSITY 1422	131	304	307	102	60	904	7	22	6	34	37	41	12	59	35	253	1157
UNIVERSITY OF MINNESOTA 4133	70	91	269	61	186	677	145	84	23	68	102	108	74	55	41	700	1377
UNIVERSITY OF MICHIGAN 3430	83	180	294	80	317	954	49	30	14	45	24	70	54	108	19	413	1367
COLUMBIA UNIVERSITY 2116	80	140	220	55	135	630	2	46	5	44	45	25	12	39	14	232	862
CORNELL UNIVERSITY 2120	66	167	308	56	179	776	147	18	11	67	65	85	86	179	56	714	1490
NEW YORK UNIVERSITY 2165	81	71	237	31	92	512	4	8	14	55	34	8	35	53	32	243	755
OHIO STATE UNIVERSITY 3142	27	97	259	25	171	579	120	23	7	62	38	86	44	118	25	523	1102
YALE UNIVERSITY 1618	51	141	238	54	127	611	10	20	2	14	27	18	12	29	17	149	760
UNIV OF CALIFORNIA L A 9365	66	113	188	56	31	454	11	3	2	26	41	40	49	63	10	245	699
UNIVERSITY OF WASHINGTON 9113	40	77	205	62	112	496	37	20	8	58	30	29	48	41	6	277	773
MASS INST OF TECHNOLOGY 1427	124	342	324	73	505	1368	2	8		19	37	2	15	4	17	104	1472
BROOKLYN COLLEGE 2105	77	136	244	18	9	484	2	8	6	18	41	16	59	35	14	199	683
PENNA STATE UNIV 2362	17	53	258	41	143	512	150	6	2	44	73	52	50	45	24	446	958
UNIVERSITY OF TEXAS 7460	56	118	174	40	113	501	3	6		15	22	28	40	47	11	172	673
UNIV OF PENNSYLVANIA 2384	44	73	199	5	61	382	4	39	6	20	26	21	23	34	3	176	558
STANFORD UNIVERSITY 9355	50	69	139	60	99	417	2	15	6	25	19	24	22	42	20	175	592
STATE UNIVERSITY OF IOWA 4222	25	39	120	29	62	275	7	14	5	53	22	21	8	43	8	181	456
NORTHWESTERN UNIV 3369	39	52	139	24	81	335	2	18	8	29	17	20	11	24	7	136	471
PRINCETON UNIVERSITY 2221	37	102	176	63	59	437	1	11		13	7	2	5	19	8	66	503
PURDUE UNIVERSITY 3226	28	68	170	2	320	588	107	24		44	23	27	39	35	27	326	914
OBERLIN COLLEGE 3140	27	101	184	24	5	341	7	7	4	22	17	28	8	44	15	152	493
UNIVERSITY OF MISSOURI 4338	21	35	106	31	48	241	122	6	4	35	31	42	11	33	12	296	537
UNIVERSITY OF NEBRASKA 4618	18	34	135	19	32	238	98	13	3	41	14	63	25	37	35	329	567
IOWA ST U OF SCI & TECH 4212	36	63	171	19	131	420	131	9	3	50	54	44	52	59	39	441	861
INDIANA UNIVERSITY 3220	22	66	152	31	7	278	5	14	7	15	25	25	23	30	11	155	433
RUTGERS THE STATE UNIV 2223	13	39	169	18	45	284	85	17	6	46	39	45	42	49	15	344	628
SYRACUSE UNIVERSITY 2187	11	35	115	22	51	234	27	7	2	19	24	40	28	33	6	186	420
UNIV OF NORTH CAROLINA 5640	25	44	126	20	60	275	54	12	2	19	10	49	5	24	17	192	467
UNIVERSITY OF KANSAS 4727	20	55	116	28	52	271	6	11	10	24	12	17	31	79	8	198	469
UNIVERSITY OF PITTSBURGH 2385	24	28	119	7	40	218	2	24	4	14	25	19	21	52	13	174	392

Appendix 6

LEADING BACCALAUREATE SOURCES 1920-1961 DOCTORATES IN SOCIAL SCIENCES, ARTS, AND PROFESSIONS

Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, Misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professional	Business Administration	Religion-Theology	Professional, Misc.	TOTAL ARTS-PROFESSIONAL	Education	TOTAL SOC. SCI.-ARTS-EDUC.	TOTAL ALL FIELDS
204	73	47	181	194	102	36	837	101	134	50	51	27	15	21	399	343	1579	3806
480	17	62	108	120	42	21	850	88	117	41	31	26	30	53	386	510	1746	3254
151	6	41	200	90	47	21	556	83	66	17	57	49	5	32	309	323	1188	3175
247	76	130	105	127	115	59	859	148	118	71	56	41	54	29	517	235	1611	3045
145	30	55	181	120	81	41	653	91	86	28	99	28	5	38	375	358	1386	3033
149	72	60	163	246	118	22	830	188	175	94	163	40	38	35	733	137	1700	2857
247	15	49	112	68	58	17	566	84	60	31	67	22	10	36	310	318	1194	2571
203	31	37	92	99	55	42	559	110	79	42	80	29	13	13	366	206	1131	2498
169	36	49	98	120	45	16	533	133	132	85	55	29	21	30	485	585	1603	2465
94	21	31	133	50	39	8	376	95	59	20	42	20	5	17	258	127	761	2251
326	23	33	85	51	41	10	569	86	73	29	49	42	16	28	323	512	1404	2159
161	7	41	117	57	32	9	424	43	56	13	37	24	4	14	191	294	909	2011
73	23	52	54	158	68	7	435	175	117	41	61	20	27	16	457	95	987	1747
214	22	24	44	97	68	29	498	57	59	22	46	5	16	7	212	213	923	1622
89	17	34	81	49	50	28	348	78	45	20	44	20	1	19	227	196	771	1544
14	1		20	2		1	38	1			1	5	1	2	10	10	58	1530
284	13	22	59	48	16	6	448	61	46	11	41	7	8	5	179	150	777	1460
95		28	59	17	16	5	220	28	10	7	20	2	5	10	82	179	481	1439
86	9	29	100	91	51	4	370	87	60	10	27	42	8	23	257	133	760	1433
97	13	29	120	54	32	10	355	111	79	36	32	14	11	6	289	150	794	1352
117	14	17	59	99	55	7	368	58	45	28	23	12	5	9	180	159	707	1299
136	3	22	67	56	54	7	345	78	37	12	80	42	3	21	273	167	785	1241
123	18	25	41	50	42	10	309	66	34	17	87	20	18	8	250	128	687	1158
57	13	15	52	101	43	5	286	107	110	37	35	9	13	13	324	42	652	1155
71	2	5	62	7	3		150	6	1	1	5	9		3	25	58	233	1147
90	5	33	49	53	38	7	275	78	53	26	67	11	10	7	252	124	651	1144
59	4	26	75	37	23	10	234	57	32	4	13	17	7	13	143	201	578	1115
73	9	20	66	32	16	18	234	31	18	12	27	11	2	13	114	181	529	1096
37		14	67	6	5	1	130	3				6	2	5	16	58	204	1065
84	7	13	38	54	26	12	234	45	42	9	32	26	3	16	173	206	613	1046
59		12	28	32	27	3	161	18	22	3	9	6	5	8	71	102	334	962
84	9	10	29	45	48	21	246	35	14	5	23	9	13	1	100	172	518	938
38	5	28	50	52	16	6	195	79	45	4	25	7	8	9	177	85	457	924
64	3	23	48	34	29	3	204	40	37	3	15	20	2	8	125	120	449	918
84		26	34	33	21	5	203	38	38	5	23	10	6	3	123	187	513	905

Appendix 6

LEADING BACCALAUREATE SOURCES, 1920-1961 DOCTORATES IN PHYSICAL AND BIOLOGICAL SCIENCES

	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat.,Cytol.,Embryol.	Physiology & Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology & Entomology	Biosciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
UNIVERSITY OF UTAH 8706	17	53	131	36	89	326	6	11	9	11	17	19	19	44	10	146	472
CATHOLIC UNIV OF AMERICA 5302	10	20	32	1	10	73			3	1	9	9	1	7	3	33	106
MICH ST UN OF AG & AP SC 3421	13	23	96	8	44	184	166	12	2	41	31	53	50	50	22	427	611
JOHNS HOPKINS UNIVERSITY 5206	29	68	140	45	135	417	2	6	2	25	19	6	11	19	7	97	514
CALIF INST OF TECHNOLOGY 9305	50	202	150	76	173	651	1			9	23	9		4	13	59	710
DARTMOUTH COLLEGE 1201	13	27	102	45	12	199	6	14	4	4	7	16	10	29	11	101	300
BROWN UNIVERSITY 1501	31	49	155	20	17	272	2	6	3	20	10	11	21	29	21	123	395
UNIVERSITY OF COLORADO 8411	15	52	112	23	63	265	1	19	2	12	20	12	13	20	10	109	374
UNIVERSITY OF ROCHESTER 2194	30	61	108	23	39	261		4	6	17	23	6	3	22	9	90	351
WASHINGTON UNIVERSITY MO 4339	14	51	83	20	74	242	2	6	8	12	19	20	4	13	4	88	330
BOSTON UNIVERSITY 1409	11	20	45	10	1	87		4	2	12	6	3	4	14	6	51	138
UNIVERSITY OF OKLAHOMA 7325	22	34	71	30	47	204	1	7	2	14	12	16	15	18	2	87	291
WAYNE STATE UNIVERSITY 3433	16	22	96	7	33	174	1	7	2	8	22	3	10	17	1	71	245
BRIGHAM YOUNG UNIVERSITY 8701	1	32	59	17	12	121	74	2	3	7	28	20	27	23	7	191	312
UTAH ST U OF AG & AP SC 8707	2	26	43	5	18	94	126	6	3	26	20	42	12	31	28	294	388
UNIVERSITY OF FLORIDA 5912	24	21	99	3	22	169	54	9		22	8	20	12	35	9	169	338
TEMPLE UNIVERSITY 2380	10	35	91	3	1	140		17	3	14	9	6	12	15	1	77	217
UNIVERSITY OF KENTUCKY 6126	17	37	75	11	33	173	61	5	5	27	10	17	18	18	7	168	341
KANS ST U OF AG & AP SCI 4713	7	18	60	6	53	144	97	8	3	29	19	31	14	45	28	274	418
UNIV OF SOUTHERN CALIF 9358	11	9	24	13	21	78		1	2	18	17	9	13	8	5	73	151
DEPAUW UNIVERSITY 3207	6	31	102	23	4	166	3	3	6	18	17	31	4	28	5	115	281
CARNEGIE INST OF TECHNOL 2307	41	124	94		211	470				1	5		2	1	2	11	481
HUNTER COLLEGE 2129	18	13	31	9	1	72	2	1	3	14	11	17	11	20	9	88	160
UNIV OF MASSACHUSETTS 1459	5	9	93	2	6	115	68	6	3	39	29	49	24	85	25	328	443
SWARTHMORE COLLEGE 2379	31	64	64		20	179	2	4	4	20	10	4	5	20	4	73	252
UNIVERSITY OF MARYLAND 5226	10	16	105	1	31	163	67	8	2	33	11	26	51	38	11	247	410
GEORGE WASHINGTON UNIV 5307	12	24	78	7	10	131	4	7	9	27	18	9	5	30	8	117	248
LA ST UNIV & AG & MECH C 7208	15	26	59	16	39	155	39	6	2	15	9	18	14	30	7	140	295
MIAMI UNIVERSITY 3135	11	60	64	24	8	167	3	3	2	7	8	37	10	29	2	101	268
UNIVERSITY OF VIRGINIA 5433	17	45	92	20	14	188	3	6	1	9	4	14	4	16	8	65	253
UNIVERSITY OF CINCINNATI 3156	21	39	67	11	49	187	2	7	3	6	19	18	6	7	1	69	256
FORDHAM UNIVERSITY 2123	7	17	94	2	4	124	1	3	1	23	15	3	6	20	7	79	203
OREGON STATE UNIVERSITY 9211	11	22	93	15	42	183	63	4	1	24	19	43	13	46	12	225	408
OKLA ST U OF AG & AP SC 7314	14	12	30	4	34	94	119	1	1	25	10	21	7	29	18	231	325

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LEADING BACCALAUREATE SOURCES 1920-1961 DOCTORATES IN SOCIAL SCIENCES, ARTS, AND PROFESSIONS

Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, Misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professional	Business Administration	Religion-Theology	Professional, Misc.	TOTAL ARTS-PROFESSIONAL	Education	TOTAL SOC. SCI.-ARTS-EDUC.	TOTAL ALL FIELDS
68	10	17	26	17	33	8	179	23	22	3	32	19	4	5	108	122	409	881
23	3	14	15	50	8		113	35	64	73	7		393	13	585	74	772	878
35	1	15	42	17	6	3	119	14	4	3	14	6	1	5	47	96	262	873
43	2	3	23	31	28	2	132	29	41	16	4		2	4	96	53	281	795
10			3		1	3	17	4	1	2	1	3			11	1	29	739
46	7	23	33	66	31	6	212	54	50	15	18	11	5	10	163	59	434	734
64	5	12	22	34	16	4	157	39	29	8	10	6	9	9	110	42	309	704
50	7	17	41	32	10	11	168	27	21	5	13	8	1	5	80	74	322	696
58	1	9	11	35	7		121	24	22	10	57	5	10	1	129	60	310	661
71	4	17	19	20	15	12	158	32	29	6	16	7	4	7	101	53	312	642
67	3	16	27	30	15	3	161	48	23	17	23	8	22	6	147	189	497	635
46	3	10	22	34	23	8	146	36	16	1	16	10	3	8	90	98	334	625
60	1	24	16	30	9	10	150	26	18	6	33	3	4	5	95	129	374	619
29	3	29	14	16	7	4	102	20	19		32	17	3	2	93	109	304	616
25		22	44	4	18	4	117	8	1		12	4	3	7	35	75	227	615
52	2	13	27	17	10	2	123	24	8	4	10	3	1	1	51	99	273	611
84	4	17	23	20	7	3	158	16	15	4	15	7	12	2	71	153	382	599
41	3	2	34	15	14	1	110	23	9	5	5	3	2	3	50	88	248	589
25	1	5	44	4	4	1	84	3	1		8	1	1	6	20	54	158	576
77	4	25	19	29	31	2	187	14	21	9	34	6	16	7	107	131	425	576
43	2	17	16	30	17	2	127	29	19	9	20	4	20	3	104	63	294	575
9		5	3	1		2	20	2	2	1	17	7	1	2	32	32	84	565
81	9	10	12	17	8	7	144	29	65	13	18	3		7	135	124	403	563
32		2	16	9	2	2	63	19	2	2	3	2	1		29	26	118	561
66	3	12	44	37	27	6	195	34	23	12	3	2	1	6	81	23	299	551
33		3	10	9	13		68	11	4	3	3		1	5	27	44	139	549
61	3	1	31	36	27	3	162	21	9	12	11	8	3	18	82	45	289	537
23	1	20	21	14	9	8	96	15	8	1	22	10	3	8	67	79	242	537
40	5	14	29	31	9	5	133	27	21	2	13	10		4	77	54	264	532
30	1	8	33	31	14	3	120	44	28	23	8	3	4	6	116	33	269	522
32	4	13	18	25	9	6	107	15	24	10	7	4	24	10	94	62	263	519
55		2	14	24	18		113	22	31	44	11	1	3	10	122	80	315	518
7		2	18		1	2	30	3	1	2	5	4		3	18	62	110	518
21		6	37	5	1		70	8	1	1	5	6	1	2	24	94	188	513

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	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat.,Cytol.,Embryol.	Physiology & Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology & Entomology	Biosciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
WEST VIRGINIA UNIVERSITY 5517	10	18	84	11	45	168	63	4	3	12	10	33	7	14	6	152	320
AMHERST COLLEGE 1402	13	41	65	15	6	140	1	5	3	3	2	2	4	14	7	41	181
WASHINGTON STATE UNIV 9110	12	30	54	15	25	136	58	9	2	21	14	39	15	14	8	180	316
WESTERN RESERVE UNIV 3159	11	18	83	2	1	115		5	8	16	15	7	8	15	10	84	199
UNIVERSITY OF NOTRE DAME 3235	15	27	131	8	54	235		2	1	6	2	4	8	10	2	35	270
UNIVERSITY OF DENVER 8410	6	17	47	1	19	90			3	15	20	7	3	7	6	61	151
WESLEYAN UNIVERSITY 1616	8	36	69	12	3	128	1	3	2	13	6	1	10	17	6	59	187
UNIVERSITY OF OREGON 9217	13	17	36	22	1	89	1	2	2	11	5	7	3	10	6	47	136
DUKE UNIVERSITY 5612	17	38	59	5	20	139	7	2		6	12	13	9	9	2	60	199
RENSSELAER POLYTECH INST 2174	12	79	115	1	188	395		4		3	8		7	1	1	24	419
OHIO WESLEYAN UNIVERSITY 3144	4	17	54	13	6	94	1	1	1	4	3	12	1	18	2	43	137
UNIVERSITY OF ALABAMA 6325	11	22	33	10	14	90	3	3	5	5	4	7	11	17	3	58	148
UNIVERSITY OF BUFFALO 2193	24	43	80	5	5	157	2	5	1	11	6	6	10	15	1	57	214
UNIVERSITY OF TENNESSEE 6240	9	15	39	3	34	100	30	5	2	10	5	18	15	16	3	104	204
POMONA COLLEGE 9341	11	37	52	23	9	132	4	1	4	4	12	15	1	20	1	62	194
EMORY UNIVERSITY 5815	7	16	94	9	4	130	1	4	1	8	9	8	7	28	5	71	201
UNIV OF CONNECTICUT 1615	2	8	44	8	17	79	24	10	2	23	13	11	41	33	14	171	250
OHIO UNIVERSITY 3143	11	12	60	6	9	98	4	1	2	3	4	17	6	12	5	54	152
AGRIC & MECH CO OF TEXAS 7401	9	16	42	6	68	141	69	6	2	21	18	10	9	21	14	170	311
UNIV OF NEW HAMPSHIRE 1207	4	13	93	14	13	137	37	4	2	8	7	11	17	31	6	123	260
UNIVERSITY OF ARKANSAS 7120	11	13	57	5	22	108	32	1		13	6	27	6	19	7	111	219
REED COLLEGE 9215	24	55	78	1	2	160	1	1	2	6	16	3	3	14	3	49	209
UNIVERSITY OF GEORGIA 5841	8	14	42	3	4	71	54	5	2	14	2	22	7	12	7	125	196
STATE COLLEGE OF IOWA 4211	3	9	18	1	2	33	1			1	2	14	5	11	1	35	68
COLLEGE OF WOOSTER 3119	9	27	68	18	3	125	1		1	5	5	4	3	17	6	42	167
N TEXAS STATE UNIVERSITY 7429	13	11	44		3	71	1	1		13	7	3	6	9	1	41	112
ST LOUIS UNIVERSITY 4332	13	19	52	14	3	101		1	5	4	4	5	7	7	4	37	138
VASSAR COLLEGE 2195	11	14	30	4		59		6		10	12	5	13	10	3	59	118
WELLESLEY COLLEGE 1460	13	10	13	3		39		5	4	11	11	19	5	12	9	76	115
RICE UNIVERSITY 7434	27	77	86	5	44	239		1		6	6	1	1	12	6	33	272
UNIVERSITY OF IDAHO 8207	8	10	37	8	14	77	47	4	3	14	12	32	16	14	10	152	229
UNION COLL & UNIVERSITY 2191	8	64	75	6	24	177	1	6	1	7	4	2	2	2	1	26	203
MT HOLYOKE COLLEGE 1439	4	4	61	2		71		6	10	22	11	13	3	33	8	106	177
UNIVERSITY OF ARIZONA 8604	7	15	54	14	19	109	23	2		10	9	15	9	13	2	83	192

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Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, Misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professional	Business Administration	Religion-Theology	Professional, Misc.	TOTAL ARTS-PROFESSIONAL	Education	TOTAL SOC. SCI.-ARTS-EDUC.	TOTAL ALL FIELDS
22	1	6	15	13	11	1	69	16	5	2	16	9	1	1	50	73	192	512
21	3	5	35	63	17	4	148	60	26	9	14	7	9	9	134	27	309	490
21	3	14	22	6	7	2	75	6	10		9	6		3	34	65	174	490
88	2	11	11	27	10	7	156	26	29	2	18	4	7	7	93	41	290	489
14	1	8	10	17	22	1	73	33	11	16	6	11	7	2	86	37	196	466
58	8	8	9	13	14	4	114	24	6	1	26	11	9	3	80	117	311	462
39	3	3	20	36	14	3	118	47	28	18	9	2	12	2	118	31	267	454
37	3	10	22	37	11	2	122	30	17	3	7	3	3	7	70	122	314	450
30	2	8	25	31	17	2	115	30	15	7	6	3	16	5	82	49	246	445
1			2	1			4				1	1	2		4	8	16	435
31	1	12	30	17	18		109	21	10	15	20	8	16	5	95	76	280	417
22		7	17	35	17	1	99	27	17	2	8	14	1	5	74	94	267	415
54	3	5	12	14	2	1	91	10	10	3	3	12	1	1	40	63	194	408
19		5	23	16	3	4	70	20	5	6	4	1	2	3	41	84	195	399
25	5	11	15	20	20	1	97	13	9	14	6	3	8		53	53	203	397
21	1	7	5	30	12	2	78	24	31	12	8	1	12	3	91	26	195	396
41		8	28	8	6	1	92	7	3		3	3	1		17	31	140	390
53	2	6	15	13	5	8	102	8	8	2	11	6	2	2	39	97	238	390
5	1	2	24	3	2		37	2	1	1	2	1	1		8	32	77	388
25		4	12	9	5	1	56	9	1	2	3		1	2	18	53	127	387
18		1	29	17	6	3	74	15	4	2	4	8	2	11	46	46	166	385
34	8	9	25	19	22		117	15	9	5	3			1	33	23	173	382
22		10	16	14	6	1	69	15	8	1	3	5	4	10	46	62	177	373
21		8	14	15	16	12	86	9	1	1	22	10	1	4	48	170	304	372
11	2	5	13	37	8	1	77	30	12	9	10	1	13	3	78	42	197	364
12		4	17	12	6	1	52	9	4	1	8	11		3	36	163	251	363
18		18	19	37	6		98	28	34	26	3	4	2		97	30	225	363
46	13	12	18	33	4	2	128	35	30	7	14	1		6	93	21	242	360
36	2	8	14	34	6	6	106	36	35	8	17		6	3	105	34	245	360
2	1	2	10	13	2	2	32	13	6	6	2	5	3	1	36	19	87	359
15		4	11	6	8	2	46	8	6		8	2	2	2	28	52	126	355
32	2	6	12	10	9		71	15	8	4	2	3	4	7	43	33	147	350
20	5	2	12	26	8	2	75	38	26	3	8		2	2	79	18	172	349
23	22	2	12	10	7	6	82	6	9	5	11	2	3	3	39	34	155	347

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	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat.,Cytol.,Embryol.	Physiology & Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology & Entomology	Biosciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
LEHIGH UNIVERSITY 2332	13	51	100	23	64	251	1	1			5	1	13	4	4	29	280
WILLIAMS COLLEGE 1463	8	27	52	21	8	116	1			3		3	3	7	2	19	135
TUFTS UNIVERSITY 1458	4	16	62	16	21	119	1	8	2	20	8	7	1	17	10	74	193
HAVERFORD COLLEGE 2324	21	23	67	6	4	121	2	3		1	9	3		11	3	32	153
FRANKLIN & MARSHALL COLL 2318	5	18	94	12	2	131	1	3	1	7	5	5	8	5	2	37	168
BAYLOR UNIVERSITY 7406	6	15	38	5		64	1	4	1	10	4	6	3	13	3	45	109
QUEENS COLLEGE N Y 2173	13	22	67	2	2	106				3	12	2	3	6	9	35	141
BOSTON COLLEGE 1408	3	20	54	3	2	82		3		4	9	1	2	3	3	25	107
ILLINOIS INST OF TECHNOL 3341	26	36	60		117	239		2		3	5	1	1		2	14	253
POLYTEC INST OF BROOKLYN 2171	7	32	145	1	110	295				2	7		1	1		11	306
AUBURN UNIVERSITY 6302	9	22	45		23	99	46	5	2	14	7	12	3	21	7	117	216
SMITH COLLEGE 1451	4	6	15	7		32	1	6	4	11	6	9	8	13	4	62	94
UNIVERSITY OF MAINE 1111	7	18	34	3	11	73	41		2	12	4	17	10	24	11	121	194
VANDERBILT UNIVERSITY 6242	9	17	50	8	15	99		3	4	2	3	5	5	1	2	25	124
ST OLAF COLLEGE 4129	6	24	84			114	3	3		2	15	5	4	13	1	46	160
CLARK UNIVERSITY 1412	5	9	58	3	1	76			1	16	5	5	6	10	3	46	122
CARLETON COLLEGE 4104	5	24	55	17	4	105	3	3	3	2	13	3	2	16	2	47	152
SOUTHERN METHODIST UNIV 7436	14	13	30	18	13	88	3		1	2	2	2	3	15	1	29	117
VIRGINIA POLYTECH INST 5436	7	13	46	10	65	141	43	1	1	5	16	10	4	10	9	99	240
SOUTHERN ILLINOIS UNIV 3383	5	3	44	1	1	54	5	3	1	2	2	5	1	14		33	87
MONTANA STATE UNIVERSITY 8108	7	15	49	21	3	95	7	6	3	6	7	15	13	18	4	79	174
BOWDOIN COLLEGE 1103	6	23	32	3	6	70	2	4		5	1	2	1	15	6	36	106
COLORADO STATE UNIV 8402	8	6	22		7	43	66	7	1	19	9	22	9	29	15	177	220
CASE INST OF TECHNOLOGY 3109	16	83	66		87	252				3	6	1				10	262
LAFAYETTE COLLEGE 2330	10	14	48	9	18	99	2	4		4	1	1	5	6	4	27	126
MONTANA STATE COLLEGE 8106	2	26	67	4	32	131	24	2		12	20	9	8	18	11	104	235
COLORADO STATE COLLEGE 8405	2		7		1	10	14			6	3	11		7	1	42	52
COLLEGE AT ALBANY 2162	7	3	26	1	1	38			1	3	1	5		4	1	15	53
SAN JOSE STATE COLLEGE 9348	7	3	33	2	3	48				3	3		9	28	1	44	92
ANTIOCH COLLEGE 3102	8	20	50	10	6	94	2	1	1	7	13	3	1	2	1	31	125
TULANE UNIV OF LOUISIANA 7216	18	13	43	5	18	97		7	2	6	8	5	1	11	1	41	138
COLGATE UNIVERSITY 2115	8	11	48	10	3	80	1	2		5	1	3		5	1	18	98
BATES COLLEGE 1102	5	9	39	8	2	63	1	5	2	11	4	4	2	21	9	59	122
BUCKNELL UNIVERSITY 2306	12	6	35	1	19	73	2	3	1	9	3	8	9	8	2	45	118

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Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, Misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professional	Business Administration	Religion-Theology	Professional, Misc.	TOTAL ARTS-PROFESSIONAL	Education	TOTAL SOC. SCI.-ARTS-EDUC.	TOTAL ALL FIELDS
11		2	6	4	1	2	26	10	6	1	2	4	3		26	15	67	347
10	6	6	14	32	23	2	93	39	21	15	14	2	2	7	100	14	207	342
29	1	1	9	10	15		65	16	7	4	6	2	5		40	37	142	335
19	1	4	11	16	11	1	63	31	36	11	11	1	9		99	9	171	324
26	2	8	6	16	6		64	15	8	2	1	1	8		35	56	155	323
21	1	9	13	29	9	2	84	31	10	3	13	6	10	5	78	51	213	322
72	5	4	13	9	4	1	108	18	14	5	14	1	1		53	20	181	322
13	1	10	16	30	7	2	79	25	21	15	5	1	7	3	77	57	213	320
14		4	3	4	1		26		3	1		6	6	3	19	20	65	318
3		1					4									8	12	318
7		1	8	11	3	1	31	5			2	5		3	15	53	99	315
41	8	8	8	37	5	2	109	28	31	9	13		3	4	88	24	221	315
13		1	17	14	10		55	9	3	1	4	2	3	2	24	38	117	311
21	1	5	12	25	8		72	57	11	4	6	2	6	3	89	25	186	310
9		1	9	17	4		40	12	8	3	11	4	15	2	55	46	141	301
33	1	10	11	23	5	23	106	11	11	4	7		2	3	38	31	175	297
16	4	5	13	18	7	1	64	18	10	6	13	3	3		53	25	142	294
33	1	6	7	19	5	4	75	16	10	4	5	4	12	4	55	39	169	286
1		6	15	1	2	1	26	4				2	1		7	13	46	286
16		2	13	14	13	8	66	1	8		9	4			22	109	197	284
17	5	5	6	12	4		49	7	6		7	3	1	7	31	25	105	279
7	2	4	7	22	14	1	57	24	39	7	12	4	2	5	93	18	168	274
5		2	8		1		16			1	2	2		1	6	31	53	273
		1	1				2			1	1	1			3	2	7	269
36	1	1	8	7	6	2	61	20	12	5	8	1	6	2	54	28	143	269
			11	1			12	1		1		1		1	4	18	34	269
9	2	6	7	2	4	2	32	8	5	1	16		1	1	32	152	216	268
16		1	4	12	4	2	39	16	8	1	9	2		2	38	131	208	261
16		3	5	14	4	1	43	3	1	2	9	3	2		20	106	169	261
57	5	7	14	5	8	1	97	4	2	2	5	2		1	16	22	135	260
32		3	6	12	3	2	58	19	10	6	7	6		5	53	8	119	257
18		5	13	16	10	4	66	8	19	7	3	3	3	2	45	47	158	256
10	2	3	7	11	5	1	39	9	15	1	3	2	9		39	55	133	255
37		1	1	7	5	4	55	12	6	3	5	1	5		32	48	135	253

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	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat.,Cytol.,Embryol.	Physiology & Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology & Entomology	Biosciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
COLL OF WILLIAM & MARY 5407	3	26	40		3	72	1	2		3	2	9	7	9	5	38	110
BRYN MAWR COLLEGE 2305	9	4	19	3	1	36		2	1	3	4		4	6	5	25	61
MISSISSIPPI ST UNIV 6412	5	4	35	7	17	68	46	1		6	4	26	8	26	9	126	194
ALLEGHENY COLLEGE 2302	4	17	52	6		79	2	3	1	1	5	5	12	6	6	41	120
KANS ST TCHRS CO EMPORIA 4711	7	13	16	1		37	1			2		6	1	14	4	28	65
RADCLIFFE COLLEGE 1448	6	6	18	1		31	1	2	1	7	3	4	1	4	7	30	61
WHEATON COLLEGE ILL 3391	5	4	36	11		56	2	1	2	6	3	10		10		34	90
ST JOHNS UNIVERSITY N Y 2183	5	4	28		3	40		8	2	10	4		7	3	3	37	77
DENISON UNIVERSITY 3122	16	18	30	19		83	1		1	1	1	4	1	7	5	21	104
INDIANA ST TCHRS COLL 3218	3	6	7	1		17		2	1	5	1	5	11	7		32	49
U OF VERMONT & ST AG COL 1309	4	8	45	2	7	66	15	5	1	8	3	14	2	4		52	118
GRINNELL COLLEGE 4210	6	8	48		4	66		1	1	5	2	3	1	9	3	25	91
CLEMSON AGRICULTURAL COL 5708	1	8	38		24	71	53			4	6	16	2	25	11	117	188
ILLINOIS ST NORMAL UNIV 3342	3	4	14			21	3			1	2	4	2	7	2	21	42
SW MISSOURI STATE COLL 4329	6	2	11	1		20				2	2		3	4	1	12	32
LOYOLA UNIVERSITY ILL 3354	10	7	38	1	2	58		2	4	7	5	1	4	4	2	29	87
GEORGIA INST OF TECHNOL 5820	9	32	49	3	94	187					2		1	1	1	5	192
UNIVERSITY OF RICHMOND 5432	7	16	34	1	3	61		1	2	2	4	10	2	7	1	29	90
UNIVERSITY OF NEW MEXICO 8508	8	8	20	10	16	62	1	1		6	1	5	1	5	4	24	86
HOPE COLLEGE 3414	3	8	86		1	98		1	6	9	13	4	4	9	2	48	146
WABASH COLLEGE 3239	4	11	58			73	2	2	3	7	3	22	3	12	1	55	128
HAMILTON COLLEGE 2125	11	7	27	7	1	53		1	2	3	3		2	4	5	20	73
UNIV OF SOUTH CAROLINA 5727	11	9	38	3	14	75	2	2		6	4		1	7	2	24	99
CORNELL COLLEGE 4206	10	12	32	6	4	64		1		5	7	1	1	3	1	19	83
MARQUETTE UNIVERSITY 3512	3	9	31		23	66		6	7	1	3	10	5	11	3	46	112
LAWRENCE COLLEGE 3510	1	6	39	5	2	53	1		1	4	6	5	4	6	1	28	81
TEXAS TECHNOLOGICAL COLL 7455	3	5	27	7	31	73	20			5	2	5	4	11	2	49	122
UNIVERSITY OF WYOMING 8301	7	7	17	20	5	56	12	1	2	3	8	19	3	10	8	66	122
MIDDLEBURY COLLEGE 1306	7	8	43	8	2	68	1	1		4	4		6	12	3	31	99
GEO PEABODY CO FOR TCHRS 6210	1		5			6	1	1		2	2	3	1	5	3	18	24
WESTERN MICHIGAN UNIV 3431	3	6	16			25				3	3	6	1	3		16	41
BARNARD COLLEGE 2118	4	9	20	1		34		2	2	7	10	3	6	8	4	42	76
UNIV OF NORTH DAKOTA 4410	1	12	34	3	9	59		2		3	10	1	2	5	1	24	83
S D ST CO OF AG & MECH A 4508	1	10	21	1	11	44	33	1	3	13	23	19	12	8	7	119	163

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LEADING BACCALAUREATE SOURCES 1920-1961 DOCTORATES IN SOCIAL SCIENCES, ARTS, AND PROFESSIONS

Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, Misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professional	Business Administration	Religion-Theology	Professional, Misc.	TOTAL ARTS-PROFESSIONAL	Education	TOTAL SOC. SCI.-ARTS-EDUC.	TOTAL ALL FIELDS
18		3	7	16	5	2	51	14	11	4	5	4	4	3	45	47	143	253
23	21	7	13	21	6		91	23	44	13	10		2	1	93	7	191	252
1		1	17	1	4		24	3				4			7	27	58	252
23	1	1	3	12	6	2	48	18	6	4	5		9	1	43	37	128	248
21		5	5	8	1		40	6	5		15	3		1	30	113	183	248
24	8	11	17	22	15		97	20	19	8	19	1		2	69	21	187	248
2	3	3	2	18	3		31	18	14	4	8	1	42	1	88	37	156	246
14		4	4	25	6	1	54	19	8	11	5	2	3	8	56	55	165	242
25		8	11	10	8	5	67	15	7	2	7	1	7	1	40	26	133	237
9		5	4	13	4	6	41	11	2		8	2	1	3	27	118	186	235
8		2	17	12	5	1	45	4	12	3	5	3	2	1	30	42	117	235
21		2	9	15	11		58	19	6	5	18	2	1	3	54	27	139	230
		6	12	1	1		20					1		1	2	19	41	229
6		2	7	3	9	27	54	4	4		5	9		1	23	108	185	227
3		4	8	14	8	4	41	2	1		9	4		2	18	136	195	227
20	1	5	3	15	11		55	24	9	13	1	2	9		58	26	139	226
3			9	1		2	15			3	1	5	1	1	11	7	33	225
24	1	8	19	20	6		78	14	10	3.	2	4	4	2	39	17	134	224
16	35	2	1	11	8	1	74	13	10	2	6	2		3	36	25	135	221
8			4	4	5	1	22	4	3	4		2	11	1	25	25	72	218
5	1		4	9	3		22	15	5	2	11	5	2	2	42	20	84	212
6		2	5	14	6	2	35	27	28	3	10	1	5	3	77	26	138	211
18	2	5	8	12	3	1	49	22	11	2	2		2	1	40	22	111	210
11	1	6	9	7	6	1	41	11	1	2	8	1	8	3	34	50	125	208
7		10	3	7	3		30	17	6	8	8	7			46	20	96	208
19	2	1	16	6	4		48	5	4	7	11	3	1		31	47	126	207
2	2	1	8	7	5		25	12	3	1	3	4		3	26	34	85	207
11	1	4	11	6	4		37	6	1		2	1	1	1	12	36	85	207
6	2		14	9	10	2	43	17	7	4	4	1	2		35	29	107	206
20		1	3	9	1	8	42	12	8		9			2	31	108	181	205
13		6	3	7	6	4	39	11	3	2	26	2		1	45	80	164	205
36	9	5	5	11	2		68	10	18	5	7			1	41	16	125	201
19	1	4	11	14	7	3	59	7	4		5	4	1	2	23	36	118	201
2	1	3	13			1	20	1			2			1	4	13	37	200

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LEADING BACCALAUREATE SOURCES, 1920-1961 DOCTORATES IN PHYSICAL AND BIOLOGICAL SCIENCES

	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat.,Cytol.,Embryol.	Physiology & Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology & Entomology	Biosciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
DAVIDSON COLLEGE 5611	4	23	32		3	62		1		1	1	1	1	4	2	11	73
KENT STATE UNIVERSITY 3130	2	8	21	1	1	33			2	3	5	10	4	7	2	33	66
OCCIDENTAL COLLEGE 9336	4	8	15	10	2	39	2	1	2	2	2	3		5		17	56
BEREA COLLEGE 6102	5	10	21	7	2	45	12			11	2	2	5	10	2	44	89
DRAKE UNIVERSITY 4208	4	5	13	1		23		3	1	6	7	1	2	5	1	26	49
UNIVERSITY OF AKRON 3155	2	13	54		6	75		2		2	3	2	5	5	1	20	95
NORTH DAKOTA ST UNIV 4402	3	2	40	2	13	60	31	1		4	12	10	15	6	7	86	146
CENTRAL MISSOURI ST COLL 4302	8	3	10			21		1			3	6	2	4		16	37
UNIV OF RHODE ISLAND 1508	3	2	33		14	52	24	5	1	11	4	27	10	15	6	103	155
UNIV OF PUERTO RICO 9810	6	5	12	1	7	31	13	5	1	8	5	10	12	10	1	65	96
BUTLER UNIVERSITY 3204	4	5	23			32		1		6	2	23	4	10		46	78
KALAMAZOO COLLEGE 3415	4	21	71	1		97			7	8	12	1		13	1	42	139
KANS ST COLL PITTSBURG 4712		1	18		1	20	2	1		1	2	3	7	6	1	23	43
DICKINSON COLLEGE 2313	2	6	23	1	1	33	1	1		2	3	1	2	3	1	14	47
UNIVERSITY OF MIAMI 5911	6	2	28		2	38	2	2	2	8	6	10	4	8	1	43	81
SAN DIEGO STATE COLLEGE 9344	1	3	15	4	3	26			1	3	8	7	4	11	3	37	63
UNIVERSITY OF LOUISVILLE 6125	6	12	44		17	79	1	1	1	3	4	1	1	4	1	17	96
BELOIT COLLEGE 3503	1	11	38	10	1	61	4			2	11	3	2	9		31	92
HOWARD UNIVERSITY 5309	3	5	17	1		26		2	2	3	2	6	4	6	1	26	52
LONG ISLAND UNIVERSITY 2138		2	20		1	23		8		15	5	3	7	10	1	49	72
EASTERN MICHIGAN UNIV 3419	2	6	22	2	2	34	1	3	2	1		2	1	8		18	52
BIRMINGHAM-SOUTHERN COLL 6310	7	8	20	1	1	37		1	1	2	4	1	1	5		15	52
GETTYSBURG COLLEGE 2321	6	9	36	1	3	55		2	1	3	4	1	1	7		19	74
UNIVERSITY OF REDLANDS 9357	1	8	13	4	1	27			1		3	2		5		11	38
CALVIN COLLEGE 3405	2	3	41		4	50	1			4	2	3	3	10	1	24	74
GEORGETOWN UNIVERSITY 5308	4	6	17	1	2	30		2	2	4	5	1	2	3		19	49
MUHLENBERG COLLEGE 2344	4	11	25	4		44		2	3	2	2	2	9	4	2	26	70
NEBRASKA WESLEYAN UNIV 4615	4	15	15			34	1	1	2	4	8	7	2	5	1	31	65
COLORADO COLLEGE 8403	6	20	16	4	2	48	2	3	2	6	5	3	6	9	1	37	85
ALBION COLLEGE 3402	6	16	13	1	2	38	1		3	3		3	5	8	1	24	62
GOUCHER COLLEGE 5204	8	9	16			33		1		11	10	5	11	11	5	54	87
KNOX COLLEGE 3347	8	10	39	1		58	1		2	2	2	4	3	5		19	77
JUNIATA COLLEGE 2327		5	56	1	2	64	1	1		4	2	2	2	2		14	78
SPRINGFIELD COLLEGE 1452										7	1		2	1	1	12	12

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LEADING BACCALAUREATE SOURCES 1920-1961 DOCTORATES IN SOCIAL SCIENCES, ARTS, AND PROFESSIONS

Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, Misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professional	Business Administration	Religion-Theology	Professional, Misc.	TOTAL ARTS-PROFESSIONAL	Education	TOTAL SOC. SCI.-ARTS-EDUC.	TOTAL ALL FIELDS
12	1	2	8	23	4		50	15	14	2	3	2	13	2	51	25	126	199
25		15	5	3	3	5	56	3	2		19	1		1	26	51	133	199
20	1		6	20	9		56	5	2	9	10		11		37	47	140	196
10		7	24	5	10		56	6	2	2	5	1	3		19	28	103	192
17		13	11	6	4	1	52	8	6	2	9	2	9	5	41	48	141	190
16	2	2	8	6	9	1	44	9	8	2	10	1	1	1	32	18	94	189
5		1	14				20	1			2		2		5	18	43	189
4		1	3	12	3	3	26	5	4		3	2	1		15	110	151	188
4	1	1	2	2			10	3	1			4		1	9	14	33	188
8	2	7	8	4	3	2	34		7	2	3	2		2	16	41	91	187
10		3	4	10	1	1	29	7	8	6	7		12	2	42	36	107	185
6		2	2	3	3		16	8		1	1	1	4		15	14	45	184
9		1	5	6	1	1	23	3	2		4	3	2	2	16	102	141	184
14	1	7	1	15	7		45	17	12	4	4		9	2	48	43	136	183
34		1	5	11	3	1	55	12	7	1	4	2	1	1	28	17	100	181
22	2	5	5	7	3	4	48	6	6		8	3	1		24	45	117	180
20	2	1	1	9	3	1	37	15	5	3	4	2	1	2	32	14	83	179
2	9	4	18	9	8	2	52	9	1	3	4	3			20	13	85	177
19	1	10	4	11	8		53	9	8	3	1			5	26	45	124	176
46		1	3	3	1	1	55	4			3				7	40	102	174
7	1	1	1	6	2	1	19	5	2	1	7				15	86	120	172
15		3	8	15	6		47	21	4	1	4		11		41	31	119	171
12		3	2	11	6	1	35	11	5	3	2	1	13		35	27	97	171
18	1	5	5	6	10		45	9	1	2	17	1	14		44	44	133	171
10		2	3	7	3		25	10	8	21	4	2	8		53	17	95	169
4		1	16	26	17	1	65	14	8	11	2	1	1	12	49	6	120	169
8	1	4	1	11	1	2	28	11	13	3	4	3	13	1	48	23	99	169
15		4	2	5	5	6	37	3		3	5	1	6		18	48	103	168
18	1		9	6	2	1	37	12	6	1	6	3	3	3	34	11	82	167
6	1	3	7	5	5	3	30	5	5	5	16	1	7		39	34	103	165
11	1	3	2	10	3	1	31	8	15	1	3		1		28	19	78	165
10			8	17	5		40	7	4	5	3	1		1	21	24	85	162
9	1	5	5	3			23	5	2	3	3		6	1	20	40	83	161
23	1	1	2	3	2		32	2		1		1	1		5	112	149	161

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LEADING BACCALAUREATE SOURCES, 1920-1961 DOCTORATES IN PHYSICAL AND BIOLOGICAL SCIENCES

	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat.,Cytol.,Embryol.	Physiology & Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology & Entomology	Biosciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
WAKE FOREST COLLEGE 5642	9	16	17		1	43	1	1	1		2	5	3	6	2	21	64
TRINITY COLLEGE CONN 1613	4	15	39	4	3	65		1		3	3	1	3	3	1	15	80
MANHATTAN COLLEGE 2140	4	10	27		14	55			2		2		4	6	1	15	70
PARK COLLEGE 4325	6	23	14	1		44			1	3	4	1	1	7		17	61
AUGUSTANA COLLEGE ILL 3307	3	1	36	23	1	64	1		1	2	2	5	1	4	1	17	81
DEPAUL UNIVERSITY 3329	8	9	25		1	43			1	2	4	3	1	2	1	14	57
MANCHESTER COLLEGE 3222	3	7	40			50				3	2	3	2	3		13	63
NE MISSOURI ST TEACH COL 4322	6	7	13			26	5			2	2	3		1	2	15	41
WASHINGTON AND LEE UNIV 5441	1	5	26	7		39		3		1	1			3	2	10	49
COOPER UNION 2119	12	24	32	1	75	144		1	1		2				2	6	150
STATE UNIV OF S DAKOTA 4511	4	8	33	4	3	52	2	3	2	2	4	4	5	3		25	77
TEXAS CHRISTIAN UNIV 7450	6	11	12	9		38		1	1	1	2		2	5	5	17	55
NORTHEASTERN UNIVERSITY 1440	5	8	45		23	81				5	5		5	3	2	20	101
WILLAMETTE UNIVERSITY 9220	5	11	26		1	43	1	1		1	4		1	4	1	13	56
UNIVERSITY OF HAWAII 9501		3	26	1	2	32	8	1	1	3	12	5	5	10	10	55	87
YESHIVA UNIVERSITY 2199	11	4	15			30				1	4			3		8	38
EARLHAM COLLEGE 3208	2	10	16	2		30	1	2		2	4	9	5	17	2	42	72
UNIV OF MISSISSIPPI 6417	11	12	16	1	4	44	1	1		3	3		3	4		15	59
BOWLING GREEN STATE UNIV 3104	5	4	25	2	1	37				3	3	3	1	3	1	14	51
COE COLLEGE 4205	1	9	32	7		49	2			2	2	5	2	5	1	19	68
COLL OF THE HOLY CROSS 1413	3	5	36		1	45		3		5	4	1	3	2	3	21	66
LEBANON VALLEY COLLEGE 2331	4	4	41	1	1	51	1			3	5	6	4	9	1	29	80
MUSKINGUM COLLEGE 3138		8	27	3	2	40		1	1		2	3	1	4	1	13	53
SE MISSOURI STATE COLL 4327	1	9	28		1	39	1		1	3	2	1		3	1	12	51
UNIVERSITY OF DAYTON 3154	12	7	21	2	17	59			1	1	4		7	3		16	75
UNIVERSITY OF DELAWARE 5103	4	4	31		14	53	15	1		1	3	10	5	3	1	39	92
WESTERN KENTUCKY ST COLL 6129	4	10	22	1	1	38	9			7	1	2	3	4		26	64
ROOSEVELT UNIVERSITY 3377	4	5	17			26			2	6	6		8	1	1	24	50
FURMAN UNIVERSITY 5718	2	11	15	1		29			2		3	9		4	1	19	48
NORTH CENTRAL COLLEGE 3365	3	13	14		1	31	1	4		7	9	2	2	7	3	35	66
WASHINGTON & JEFFERSON C 2391	19	13	26		5	63			1		1	1	3	5	1	12	75
COLLEGE AT BUFFALO 2148	2				1	3		2				1		1		4	7
MONMOUTH COLLEGE ILL 3360	2	2	60	3	3	70	2	2	2		6		1	6	1	20	90
ALFRED UNIVERSITY 2102	5	5	28	3	33	74	1			2	4	1	2	5	2	17	91

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Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professional	Business Administration	Religion-Theology	Professional, Misc.	TOTAL ARTS-PROFESSIONAL	Education	TOTAL SOC. SCI.-ARTS-EDUC.	TOTAL ALL FIELDS
7		4	2	21	3		37	11	8	4	3	1	10	2	39	21	97	161
7		1	3	14	1		26	10	18	3	4	1	3		39	15	80	160
4			3	14	4		25	11	11	7	2	1		4	36	28	89	159
8		3	6	7	4	1	29	11	8	1	7		12		39	30	98	159
6	1	3	3	15	7		35	2	4	2	7		2		17	24	76	157
7	1	3	5	5	2	3	26	12	8	6	9	9	4	2	50	23	99	156
7		4	4	14	4		33	3			15	2	6	1	27	33	93	156
2		1	2	16	7	1	29	4	1		6	3	1	1	16	70	115	156
7		3	5	29	9	2	55	17	7	2	4	5	3	4	42	10	107	156
2			2				4					1			1		5	155
10		1	4	9	8		32	5	2	1	12	2	1	3	26	20	78	155
8		6	9	8	2	1	34	13	4	1	5	3	12	1	39	26	99	154
19		2	8	4	1	1	35	2		2			1		5	13	53	154
12	1	7	4	8	4		36	4	2	4	6		9	1	26	36	98	154
5	5	3	4	6	5	1	29	3	4	1	3	1	1		13	24	66	153
21		5	2	12	2	1	43	4	10	4	1		30		49	23	115	153
6	3	4	5	15	6		39	8	6	3	8	1	2	1	29	12	80	152
15		4	7	20	5		51	12	5		2	3		4	26	16	93	152
12		7	4	10	1	2	36	2	2	1	9	6		1	21	42	99	150
12		7	10	3	2	1	35	3	3		4	3	1	1	15	32	82	150
5		5	4	9	3		26	18	6	5	2	1	2	4	38	20	84	150
6			3	7			16	3	3		2	1	10		19	35	70	150
14		2	3	4	5	2	30	6	3	2	10	1	2	3	27	39	96	149
5		1	2	7	2		17		1		10	1		1	13	67	97	148
5		8	3	6	2		24	13	7	5	1	1	3	1	31	17	72	147
7	1	2	2	8	2		22	5	6		5	1	1		18	13	53	145
3			9	11	4	2	29	6	3		2	1		1	13	39	81	145
38	2	5	4	8	4		61	4	1	2	15		2		24	9	94	144
7	1	4		10	4		26	26	4	2	1	2	8	2	45	24	95	143
8		4	5	5	3		25	7	5	2	9	1	9		33	19	77	143
4			4	9	1	1	19	10	8		3	1	3		25	24	68	143
8		2	1	4		5	20	2	1		2			1	6	109	135	142
3			4	3	4		14	4	2	2	6	1	4		19	17	50	140
4		1	1	4	1		11		3	1	5		1	1	11	26	48	139

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	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat.,Cytol.,Embryol.	Physiology & Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology & Entomology	Biosciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
GONZAGA UNIVERSITY 9104	3	3	14	1	5	26					1		1	2	1	5	31
WHITMAN COLLEGE 9116	4	22	19	1	2	48		1	1	3	3		2	4	1	15	63
UNIVERSITY OF WICHITA 4718	2	5	29	5	2	43		1	2	4		1	4	4		16	59
MARYVILLE COLLEGE TENN 6221	6	1	16			23				1	3	5	2	9		20	43
URSINUS COLLEGE 2387	2	6	27			35		1		4	4	2	2	5	1	19	54
FLORICA STATE UNIVERSITY 5907	2	4	6	2		14				3	1	4	2	1	2	13	27
HAMLINE UNIVERSITY 4114	1	3	27			31		3	1		4			3		11	42
WITTENBERG UNIVERSITY 3163	4	5	19	2		30	1	1	1	1	3	2	1	5	1	16	46
UNIVERSITY OF DETROIT 3429	4	4	30		18	56				7	4	3	4	2	1	21	77
CENTRAL METHODIST COLL 4301	4	7	48	2		61				2	3	2	1	8		16	77
U S MILITARY ACADEMY 2190	4	19	3	3	43	72											72
WORCESTER POLYTECH INST 1464	3	22	48	2	40	115				1	5	1	1	1		9	124
BALL STATE TEACHERS COLL 3203	5	2	6	1		14	1	1		1	1	2		2		8	22
DUQUESNE UNIVERSITY 2316	4		29	1		34		1	1	8	4	2	2	2		20	54
HIRAM COLLEGE 3128		9	36	1	1	47	1	2		1	1	6	1	1	1	14	61
PHIL COLL OF PHARM & SCI 2365		1	43		1	45	1	15		25	7	6	22	4		80	125
LUTHER COLLEGE 4216	9	9	17	1		36		1	1	5	1	3	4	9		24	60
SOUTHWESTERN COLLEGE 4720	4	7	21		2	34	1		2	2	4	2	1	16	1	29	63
HOBART & WM SMITH COLL 2112	3	9	20			32	2	1		3	4	3	2	8	1	24	56
MARIETTA COLLEGE 3133	7	4	28	8		47				1	3	6	5	12	2	29	76
UNIV OF CALIF SANTA BARB 9368		2	4	1		7				2	1	4	2	6	3	18	25
UNIVERSITY OF TOLEDO 3157	1	8	26		6	41	1	4	4	5	4	2	4	3	2	29	70
EASTERN ILLINOIS UNIV 3330	3	1	9	2		15	3					18		7	2	30	45
BAKER UNIVERSITY 4701	3	2	20			25	1			1		1	1	3		7	32
WILLIAM JEWELL COLLEGE 4343	2	8	28		3	41			1	1	1	1	1	2		7	48
U S NAVAL ACADEMY 5224	12	22	5	1	32	72						1		1	2	4	76
KENYON COLLEGE 3131	9	6	24		2	41			1	1	1	1	2	6	1	13	54
BRADLEY UNIVERSITY 3310	2	4	35	2	5	48					7	1	1	2		11	59
MOUNT UNICN COLLEGE 3137	2	3	38	5	2	50					4	1	9	2		16	66
WOFFORD COLLEGE 5730	10	2	14			26		2	1		2			1		6	32
CREIGHTON UNIVERSITY 4603	3	2	21		1	27		2	3	5	6	1	4	2		23	50
FRESNO STATE COLLEGE 9318	3	7	12	3		25	1		1	2		4	1	7	2	18	43
BALDWIN-WALLACE COLLEGE 3105	3	4	20		2	29				1	2	2	1	2	2	10	39

Appendix 6

LEADING BACCALAUREATE SOURCES 1920-1961 DOCTORATES IN SOCIAL SCIENCES, ARTS, AND PROFESSIONS

Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, Misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professional	Business Administration	Religion-Theology	Professional, Misc.	TOTAL ARTS-PROFESSIONAL	Education	TOTAL SOC. SCI.-ARTS-EDUC.	TOTAL ALL FIELDS
9		6	5	24	7		51	14	8	14	1		5	2	44	13	108	139
6		2	8	5	4		25	8	6	3	4	2	2	1	26	25	76	139
12			5	5	6	1	29	7	2		10	4			23	27	79	138
7		3	7	8	3		28	10	5	4	6	3	7	3	38	27	93	136
9			2	10	8		29	6	3	3			9	1	22	31	82	136
20	1	5	2	7	5	1	41	6	10	2	4		1	4	27	39	107	134
14	1	8	6	8	4	1	42	1	3	4	8		6	1	23	27	92	134
19	4	1	1	6	4	1	36	3	7	4	8		3		25	27	88	134
11		2	1	7	2		23	9		4	2	3	2	2	22	11	56	133
		2	3	4			9	10	2	2	3		5		22	24	55	132
7	1	2	2	10	22		44	1				3		3	7	8	59	131
1			3				4					1			1	2	7	131
7			2	5	4	1	19	2	1		2	2		1	8	81	108	130
9		1	6	3	1	2	22	9	8	1		1	2		21	32	75	129
4		1	5	10	4	1	25	2	4	1	8	2	5		22	20	67	128
													1		1	2	3	128
6		1	4	11	2		24	7	6	1	3	2	3		22	21	67	127
2		2	7	6	3		20	6	1	1	3		3	1	15	29	64	127
7		3	7	10	2	1	30	10	7		5		2		24	16	70	126
8		4	2	2	2	2	20	4	2	3	5				14	16	50	126
9	1	2	3	11	3		29	4		2	13				19	52	100	125
6		2	2	7	2	3	22	5	5	1	2	2			15	18	55	125
			4	4	5	3	16	5	1		10	2		1	19	43	78	123
9	1	7	6	4			27	3	2	2	7	2	17		33	30	90	122
8		3	7	3	2		23	4	7	2	3		9	1	26	24	73	121
4			2	6	6		18	3	1	1		3		4	12	14	44	120
7			6	3	3		19	23	5	7	4	2		1	42	4	65	119
7			5	3	5	1	21	6			4	1	2		13	25	59	118
3				6			9	5	2	1	1		9		18	25	52	118
3		3	1	9	3		19	25	7		1		7	2	42	25	86	118
6		2	6	10	1		25	6	5	7	1	6	2	2	29	13	67	117
12		1	3	7	3		26	2	1	1	7	1	2		14	33	73	116
9		5	4	7	4	1	30	3	7	5	7	1	3	2	28	18	76	115

Appendix 6

LEADING BACCALAUREATE SOURCES, 1920-1961 DOCTORATES IN PHYSICAL AND BIOLOGICAL SCIENCES

	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat.,Cytol.,Embryol.	Physiology & Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology & Entomology	Biosciences, Misc.	TOTAL BIO-SCIENCES	TOTAL NATURAL SCIENCES
NORTHERN ILLINOIS UNIV 3367	2		5		2	9	1		1	2	1	9	1	7	3	25	34
VALPARAISO UNIVERSITY 3236	2	10	17		4	33			1	3	4	3	3	3	1	18	51
CENTRAL MICHIGAN UNIV 3407		1	5	1		7	2				2		1	3		8	15
COLBY COLLEGE 1104	3	3	13	4		23		1			1		1	3	2	8	31
DREW UNIVERSITY 2230	4	6	24	1		35	1			5	2	6		5		19	54
ST LAWRENCE UNIVERSITY 2186	2	7	21	6	1	37	1			1	4	1	1	6	2	16	53
WASHBURN UNIV OF TOPEKA 4728	7	2	10	1	1	21		1		2	2	4		6		15	36
MISSISSIPPI COLLEGE 6409	3	10	32		1	46			1	1		5		2	3	12	58
GROVE CITY COLLEGE 2322	5	2	26		7	40		1			1	2		6	1	11	51
HASTINGS COLLEGE 4607	2	9	15			26	2			1	3		1	2		9	35
CANISIUS COLLEGE 2107	4	13	34		2	53				2	3	1	1		1	8	61
OTTERBEIN COLLEGE 3145	2	2	17	1	1	23		1		6	2	2	2	9	1	23	46
UNIVERSITY OF SCRANTON 2386		17	20			37				9	9	1	13	2	1	35	72
VILLANOVA UNIVERSITY 2389		7	28		16	51		3	1	1			4	5	1	15	66
EAST TEXAS STATE COLLEGE 7415	2	3	10			15	1	1		1			1	2		6	21
GENEVA COLLEGE 2320	2	6	16		1	25			2	1	2	3		7		15	40
ILLINOIS WESLEYAN UNIV 3343	4	3	25		1	33	2			4	3	3	1	1		14	47
MACALESTER COLLEGE 4116	3	3	18	2	1	27	3	2		4	2	1	5	2	1	20	47
SAN FRANCISCO STATE COLL 9346			3			3		1		2	1	1		2		7	10
SOUTHWEST TEXAS ST COLL 7440	4	1	14			19	4		1	4	1	1	1	5	1	18	37
COLLEGE OF ST THOMAS 4109	6	3	43		2	54	2	1		4	4	1	3	4	1	20	74
MONTCLAIR STATE COLLEGE 2217	1		4		1	6			1	2	2			1	3	9	15
UNIV OF S WEST LOUISIANA 7215	4	6	8	1	4	23	20			4	1	8	2	5	1	41	64
DRURY COLLEGE 4310	2	5	12	5	1	25	1			2	1	2	1	4	1	12	37
FORT HAYS KANSAS ST COLL 4709	4	3	10			17	4			2	2	6		4	1	19	36
MISSOURI SCH MINES & MET 4345	1	14	15	16	49	95		1			4					5	100
RANDOLPH MACON COLLEGE 5423	4	11	29			44				2			1	2	1	6	50
TOTAL	3861	8015	19159	2947	7804	41786	3918	1275	589	3245	3143	3317	2648	4762	1639	24536	66322

Appendix 6

LEADING BACCALAUREATE SOURCES 1920-1961 DOCTORATES IN SOCIAL SCIENCES, ARTS, AND PROFESSIONS

Psychology	Anthropology-Archeology	Sociology	Economics	History	Pol. Sci. & Publ. Admin.	Social Sciences, Misc.	TOTAL SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professional	Business Administration	Religion-Theology	Professional, Misc.	TOTAL ARTS-PROFESSIONAL	Education	TOTAL SOC. SCI.-ARTS-EDUC.	TOTAL ALL FIELDS
5	1	2	1	1	4	2	16	1			7				8	56	80	114
11		1		8	1	3	24	6	2	1		2		4	15	23	62	113
6		5	2	2	1	4	20	5	3	1	7	2			18	59	97	112
7		2	6	7	2		24	14	5	2	1	2	3	2	29	28	81	112
17	1		1	6	2		27	4	3	2	1	1	8		19	12	58	112
10		5	2	4		1	22	3	1		2	1	1		8	29	59	112
10		1	10	3	3	1	28	6	2		4	3	2	2	19	29	76	112
3		6	1	9	2		21	5	5	1	1	1	4		17	15	53	111
1			1	3			5	3	1		2	1	4	1	12	42	59	110
6	1	1	9	6	3	1	27	2	2	1	7	1	3	1	17	30	74	109
4		3	1	7			15	5	1	1	3	1	2		13	19	47	108
5		2	4	5	2		18	2	3	1	6	1	6		19	25	62	108
6		3	2	3			14	8	3	2			1		14	8	36	108
		2	3	8			13	3	8	8			1	1	21	8	42	108
3		2	2	6	2		15	12	2		3	1		2	20	51	86	107
13			4	4	1		22	3	1		4		1	2	11	34	67	107
6		3	2	5	2		18	4	1		12	1	3	1	22	18	58	105
9	1		1	4	7		22	6	4	2	3	2	7		24	12	58	105
5		6	3	4	1	1	20	2		3	3			1	9	66	95	105
2			4	4	4		14	5			2	1		2	10	44	68	105
7		2	1	3			13	4	2	1			2		9	8	30	104
		3	1	1	6	1	12	5	3		4	2			14	63	89	104
			3	6			9	1	4	1	3	2		1	12	17	38	102
2		3	7	7	2		21	3	3	2	3	3	4		18	25	64	101
18		3	3	1	6	1	32	1			4	1	1		7	26	65	101
																		100
1		1	2	8	4	1	17	9	6		1		5	2	23	10	50	100
9421	982	2386	5393	5788	3123	965	28058	5771	4303	1859	3359	1388	1806	1137	19623	18214	65895	132217

Appendix 7

FORTY LEADING DOCTORATE INSTITUTIONS AND THEIR MAJOR BACCALAUREATE SOURCES

Doctorate Institution → ↓ Baccalaureate Institution		Columbia University	Univ. of Wisconsin	Harvard University	University of Chicago	University of Illinois	Univ. of Calif. (Berkeley)	Cornell University	New York University	University of Michigan	Ohio State University	Yale University	University of Minnesota	State Univ. of Iowa	Stanford University	Mass. Institute of Tech.	Univ. of Pennsylvania	Johns Hopkins University	Purdue University
UNIV CF CALIFORNIA BERK	9356	138	60	117	64	41	2131	66	17	54	20	41	38	11	183	49	17	20	17
CITY COLLEGE OF THE CITY OF NY	2188	830	55	97	54	36	55	61	719	56	49	58	26	23	25	57	41	22	30
UNIVERSITY OF ILLINOIS	3388	107	185	68	123	1193	67	132	49	76	59	34	74	74	27	57	24	17	59
UNIVERSITY OF CHICAGO	3387	129	56	79	1735	95	76	33	41	44	22	49	47	28	31	29	21	21	13
UNIVERSITY OF WISCONSIN	3527	119	1725	89	75	72	51	47	36	58	44	31	89	43	35	24	17	15	29
HARVARD UNIVERSITY	1422	213	42	1465	104	28	80	43	48	54	9	92	28	15	39	77	33	35	6
UNIVERSITY OF MINNESOTA	4133	90	80	74	54	62	60	53	23	45	26	41	1328	55	26	22	13	24	20
UNIVERSITY OF MICHIGAN	3430	117	66	69	58	58	68	24	24	1311	35	37	40	21	27	21	18	25	24
COLUMBIA UNIVERSITY	2116	1405	38	75	38	23	35	34	191	34	26	58	10	9	25	25	31	25	11
CORNELL UNIVERSITY	2120	130	65	90	49	59	54	968	59	47	20	70	38	9	27	47	29	31	33
NEW YORK UNIVERSITY	2165	240	22	48	24	22	23	30	1047	34	27	45	10	19	12	24	28	17	19
OHIO STATE UNIVERSITY	3142	101	54	44	53	34	32	54	23	39	1085	16	25	16	11	16	13	13	29
YALE UNIVERSITY	1618	124	18	126	40	14	42	23	26	36	8	902	23	10	29	34	22	15	4
UNIV CF CALIFORNIA L A	9365	51	16	32	46	13	201	11	7	17	11	25	14	8	65	13	7	10	4
UNIVERSITY OF WASHINGTON	9113	106	51	57	49	22	94	24	16	31	19	46	24	16	80	36	15	17	10
MASS INSTITUTE CF TECHNOLOGY	1427	60	14	72	23	48	30	18	15	28	11	17	10	1	26	814	15	22	13
BROOKLYN COLLEGE	2105	242	39	45	29	26	19	23	268	32	29	48	17	23	9	20	38	19	39
PENNSYLVANIA ST UNIVERSITY	2362	42	43	32	20	56	23	69	20	33	33	30	39	6	5	25	66	17	24
UNIVERSITY OF TEXAS	7460	71	39	64	55	33	39	8	11	28	25	33	13	8	10	32	13	8	7
UNIVERSITY OF PENNSYLVANIA	2384	84	14	49	16	27	16	19	31	17	6	20	10	3	6	19	733	18	2
STANFORD UNIVERSITY	9355	57	16	73	25	14	98	16	4	21	12	37	13	5	613	27	6	15	5
STATE UNIVERSITY OF IOWA	4222	74	40	39	36	24	18	20	11	19	13	14	29	667	16	1	6	8	8
NORTHWESTERN UNIVERSITY	3369	47	47	69	104	49	29	13	11	22	18	30	34	23	19	13	11	10	19
PRINCETON UNIVERSITY	2221	101	20	124	33	17	26	27	15	16	7	88	7	3	16	31	38	33	1
PURCUE UNIVERSITY	3226	15	55	13	27	61	18	47	6	41	30	8	13	7	14	26	7	4	491
OBERLIN COLLEGE	3140	86	54	83	88	34	31	78	27	57	61	77	22	26	18	15	19	34	5
UNIVERSITY OF MISSCURI	4338	58	35	35	57	59	27	43	17	23	19	30	31	29	18	3	4	11	10
UNIVERSITY OF NEBRASKA	4618	57	70	20	38	60	34	53	8	22	24	22	57	33	19	11	10	12	22
IOWA ST UNIV OF SCI & TECH	4212	22	58	17	20	45	35	45	6	13	21	12	56	50	6	12		4	28
INDIANA UNIVERSITY	3220	55	38	29	53	41	11	19	11	33	25	27	15	28	14	8	9	13	27
RUTGERS THE ST UNIVERSITY	2223	73	48	28	13	16	17	47	58	21	26	33	17	5	5	16	27	25	16
SYRACUSE UNIV	2187	95	31	27	23	19	10	47	37	29	19	23	14	9	10	10	20	14	8
UNIVERSITY OF NORTH CAROLINA	5640	54	27	33	19	21	15	50	13	13	20	21	14	7	5	13	8	26	8
UNIVERSITY OF KANSAS	4727	35	44	46	59	39	51	29	10	33	24	29	28	19	18	11	9	12	7
UNIVERSITY OF PITTSBURGH	2385	31	17	19	19	15	8	16	16	9	13	9	7	12	4	6	13	5	5
UNIVERSITY OF UTAH	8706	28	34	32	40	11	79	15	13	19	17	13	25	12	48	14	4	9	22
CATHOLIC UNIV OF AMERICA	5302	6	2	3	3	4		2	4	1	1	5	2	1	2	1	13	10	2

Appendix 7

FORTY LEADING DOCTORATE INSTITUTIONS AND THEIR MAJOR BACCALAUREATE SOURCES

Northwestern University	Iowa State University of Science and Technology	Indiana University	Princeton University	University of Texas	Pennsylvania State Univ.	Catholic Univ. of America	University of Pittsburgh	Univ. of So. California	Univ. of North Carolina	Univ. of California (L.A.)	University of Washington	Michigan State Univ. of Agri. and Applied Science	University of Missouri	Calif. Inst. of Technology	Fordham University	Boston University	Duke University	University of Maryland	Rutgers University	Syracuse University	University of Nebraska	TOTAL
19	15	2	31	14	7	4	5	91	7	108	42	11	8	58		3	11	11	1	6	5	3543
21	5	29	29	16	35	10	23	23	12	18	5	13	5	9	58	7	37	38	29	26	2	2744
102	52	42	19	11	39	3	13	21	9	17	16	29	23	16		5	7	12	10	1	9	2881
88	9	16	18	5	10	5	10	19	13	26	10	7	6	13		5	3	5	3	6	4	2830
46	22	23	17	6	7	4	12	8	7	13	10	17	5	14		3	7	12	13	3	6	2854
24	3	9	57	5	7	4	8	9	14	17	7	3		33	2	52	17	7	2	3	2	2696
25	33	17	12	12	21	7	6	16	10	24	21	18	11	22		4	5	14	6	7	11	2398
32	11	17	24	6	10	4	20	12	4	15	10	30	1	13	1	8	13	7	4	11	2	2298
11	3	17	35	3	6	8	6	8	11	6	1	2	2	8	17	7	6	8	20	8	1	2287
4	20	11	36	4	19	2	9	2	13	7	6	23	2	25		6	7	15	23	11	3	2073
11	4	19	34	11	18	5	12	14	6	13	8	6	4	4	17	9	7	8	24	14	4	1943
14	22	22	7	6	15	2	19	11	7	10	4	21	9	7	2	2	3	8	9	8	2	1868
12	2	11	43	4	5	3	7	5	5	8	4	3		19	2	9	10	1	1	4		1654
5	4	10	17	8	4	1	4	187	1	674	13	2	2	39		3		5	1	3	1	1535
25	4	4	24	10	4	5	6	15	3	19	541	2	3	18			7	3		7	4	1417
6	9	8	33	1	13	3	10	2	2	12	5	1	2	36		7	6	2	2	7	1	1405
15	8	14	21	9	21	3	12	6	7	6	3	5	4	5	11	6	14	9	27	17	4	1192
12	22	5	18	6	435	2	63	1	8	10	1	27	7	4	2	5	10	24	18	6	1	1270
8	3	8	10	681	6	4	6	5	14	9	2	1	6	15			9	5	1	1	1	1292
7	1	7	24	3	13	2	17	4	3	4		2		3	2	4	3	3	9	5	1	1207
10	1	6	23	5	6	1	2	35		18	20	2		27	1	4	5	1		1	4	1229
11	14	12	5	4	5	1	4	10	4	8	8	2	6	3	1	1		3	2	5	9	1161
350	7	17	18	5	5	2	1	11	7	14	7	6	8	6		4	1	4	1	3		1045
12		6	400	3	2	3	10	2	6	5	4	2	1	20		1	4	2	4	2	1	1093
13	28	18	5	6	15	2	6	2	4	2	6	21	6	10		1	4	5	8	6	1	1052
14	8	12	39	3	11	1	12	7	5	5	7	2	2	8	1	5	15	3	6	11	1	993
15	27	7	7	10	12	1	5	6	9	1	4	11	348	3			1	5	1	4	4	990
20	46	10	5	6	6		3	7	9	7	11	13	11	10	1	3	1	4	6	3	212	966
9	400	8		3	10		1	3	13	6	4	23	7	11	1		4	8	5	3	7	976
20	2	378	7	8	6	2	10	10	3	3	8	10	2	1		4	3	5	3	4	4	949
3	9	10	33	1	23	1	5	2	4	6		10	3	4	3	2	6	16	233	6	1	872
7	3	2	16	6	15	3	10	4	4	2	5		1	3	3	8	10	4	13	250		814
11	20	8	15	9	10		1	3	308	1	1	2	5	3	1		28	12	2	3	1	811
11	15	9	7	14	6	2	8	7	3	2	6	2	7	3		1	3	1	2	1	6	619
5	1	4	7	1	20	1	533	5	2	4	3	2	1	6		3	4	6	1	2		835
10	12	7	11	2	5		1	29	1	9	18	3	1	16		1	1	2		2	1	567
		1	6		2	727	8	3	1						16			5				831

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FORTY LEADING DOCTORATE INSTITUTIONS AND THEIR MAJOR BACCALAUREATE SOURCES

Doctorate Institution → ↓ Baccalaureate Institution		Columbia University	Univ. of Wisconsin	Harvard University	University of Chicago	University of Illinois	Univ. of Calif. (Berkeley)	Cornell University	New York University	University of Michigan	Ohio State University	Yale University	University of Minnesota	State Univ. of Iowa	Stanford University	Mass. Institute of Tech.	Univ. of Pennsylvania	Johns Hopkins University	Purdue University
MICHIGAN ST UNI OF AG & AP SCI	3421	11	57	14	13	32	24	35	3	53	32	14	25	15	3	3	3	9	29
JOHNS HOPKINS UNIVERSITY	5206	36	7	25	12	3	10	4	11	7	7	10	4	3	3	7	13	505	4
CALIFORNIA INST OF TECHNOLOGY	9305	14	10	32	3	6	62	9	2	5	5	21	11	1	40	29		12	4
DARTMOUTH COLLEGE	1201	103	23	120	38	22	17	41	16	27	13	50	17	6	14	24	13	11	1
BROWN UNIVERSITY	1501	40	21	89	22	23	11	25	12	10	8	45	10	7	6	24	15	14	3
UNIVERSITY OF COLORADO	8411	35	22	38	32	35	25	20	5	16	12	26	18	16	32	5	7	15	10
UNIVERSITY OF ROCHESTER	2194	58	20	47	18	24	18	49	11	12	16	22	4	17	4	24	10	16	13
WASHINGTON UNIVERSITY MO	4339	32	28	34	20	39	12	8	14	12	8	16	14	14	11	10	8	7	4
BOSTON UNIVERSITY	1409	48	11	80	20	5	4	4	22	4	4	16	5	5	3	3	4	3	5
UNIVERSITY OF OKLAHOMA	7325	28	30	12	27	23	24	5	11	19	8	14	13	17	20	6	4	8	12
WAYNE STATE UNIVERSITY	3433	20	17	13	23	10	8	5	5	169	22	8	6	9	7	8	5	2	19
BRIGHAM YOUNG UNIVERSITY	8701	21	48	15	19	16	41	25	11	8	28	1	8	12	36	4	1	2	8
UTAH STATE UNIV OF AGR & AP SC	8707	12	61	3	11	16	54	90	2	6	15	3	31	7	29	4	1	1	18
UNIVERSITY OF FLORIDA	5912	23	25	19	15	14	4	32	10	7	31	10	11	5	5	3	3	7	12
TEMPLE UNIVERSITY	2380	34	9	12	7	9	5	8	22	7	16	7	2	3	1	12	139	4	9
UNIVERSITY OF KENTUCKY	6126	24	31	14	19	37	8	30	10	21	24	10	14	8	2	11	1	8	19
KANSAS ST UNIV OF AG & AP SCI	4713	21	61	11	19	38	17	31	2	9	29	3	42	18	7	6	4	8	19
UNIVERSITY OF SOUTHERN CALIF	9358	30	9	20	11	3	29	5	3	5	7	12	4	9	25	2	3	4	3
DEPAUW UNIVERSITY	3207	15	42	19	30	59	9	26	6	19	24	12	14	22	8	6	8	7	33
CARNEGIE INST OF TECHNOLOGY	2307	17	8	9	14	14	10	12	9	8	10	9	7	2	5	18	4	4	3
HUNTER COLLEGE	2129	171	8	2	10	9	6	13	150	4	4	18	3	3			9	8	6
UNIVERSITY OF MASSACHUSETTS	1459	15	17	52	7	26	4	69	11	11	13	26	13	9	6	18	6	5	11
SWARTHMORE COLLEGE	2379	55	13	80	24	12	17	22	5	23	3	42	4	7	7	21	68	9	1
UNIVERSITY OF MARYLAND	5226	13	18	6	2	17	2	26	6	12	17	11	6	7	2	3	6	18	5
GEORGE WASH UNIVERSITY	5307	39	16	21	22	13	6	9	12	7	8	11	8	3	7	4	10	38	3
LA STATE UNIV & AG & MECH COL	7208	13	19	11	11	15	11	23	6	15	18	11	12	12	7	8	2	2	9
MIAMI UNIVERSITY	3135	14	32	21	35	44	7	7	3	20	110	13	6	15	3	11	2	5	8
UNIVERSITY OF VIRGINIA	5433	19	12	28	13	9	5	16	4	8	6	23	5	2	3	4	7	23	2
UNIVERSITY OF CINCINNATI	3156	44	17	18	24	14	3	12	9	13	25	15	8	5	3	11	1	11	4
FORDHAM UNIVERSITY	2123	42	3	4	8		1	1	49	1	6	9	1		1	1	3	5	9
OREGON STATE UNIVERSITY	9211	15	49	8	5	18	28	17		10	10	10	18	10	35	7	5	7	20
OKLAHOMA ST U OF AGR & AP SC	7314	12	45	4	7	18	5	28	3	7	28	3	11	3	5	2	1		17
WEST VIRGINIA UNIVERSITY	5517	23	26	8	17	15	3	38	7	9	38	10	17	14	3	8	6	12	18
AMHERST COLLEGE	1402	83	12	115	20	9	6	13	12	14	2	43	6	4	4	22	10	9	3
WASHINGTON ST UNIVERSITY	9110	20	36	11	16	12	20	25	4	9	9	2	28	11	22	6	1	3	15
WESTERN RESERVE UNIVERSITY	3159	27	13	16	23	12	8	10	9	11	48	13	12	7	3		8	9	2
UNIVERSITY OF NOTRE DAME	3235	17	6	9	20	16	10	7	3	9	10	8	5	1	5	13	7	3	7

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FORTY LEADING DOCTORATE INSTITUTIONS AND THEIR MAJOR BACCALAUREATE SOURCES

Northwestern University	Iowa State University of Science and Technology	Indiana University	Princeton University	University of Texas	Pennsylvania State Univ.	Catholic Univ. of America	University of Pittsburgh	Univ. of So. California	Univ. of North Carolina	Univ. of California (L.A.)	University of Washington	Michigan State Univ. of Agri. and Applied Science	University of Missouri	Calif. Inst. of Technology	Fordham University	Boston University	Duke University	University of Maryland	Rutgers University	Syracuse University	University of Nebraska	TOTAL
10	32	10	3	6	9		1	7	4	6	2	281	3	2	1		5	4	14	4	1	780
2	1	4	11		7	4	2	1	6		1	1		6	1	1	4	22	1	1		747
2	2	1	28	3	4		3	8		47	3			326		2	5	1		1	1	703
9	2	6	29	3	8		1	1	6	2	4	2	1	4	1	18	7		7	6		673
9	3	6	26	1	5	1	2	2	3	4	7			2		18	10	7	4	3		498
11	7	6	9	5	2	3	3	6	3	10	13	1	5	7			4	3	1	4	5	477
9	5	4	13	2	7	1	7	3	5	6		1	1	3	1	5	7	3	2	17	1	486
11	2	7	5	7	4	1	3	1	2	4	2	1	9	3		1	1	3	2	1	1	362
5		4	6	2	3	5	11	2	6	4	1	2			2	208	7	6	4	6		530
11	8	14	8	27	7		1	1	5	6	4	5	5	10		1	3	3			2	402
17	5	6	3	3	6		1	6	1	1	2	16						8	1	3	1	436
3	40	10	4	1	6		1	27	10	9	9	5	5	5		2	3	4	15		5	468
2	43	4		2	13		3	9	6	9	5	14	3	1		1	2	3	14	4	4	506
11	11	8	5	9	6	1	2	2	19	1	3	3	5	1	1	2	8	5	7	1	2	349
		4	8	3	20	1	6	4	1	1	1					2	5	10	8			380
9	17	10	2	6	8	1	2	2	13			14	6	3	2	3	7	3	5	1	1	406
2	52	3	1	3	10	1	2	3	6		2	14	12	1			1	3	3	1	10	475
5	1	4	4	2	2		2	275		22	6	1	1	11	1	3		1		3	1	529
25	4	64	6	1	2	1	1	6	2	3	3	5	3			19	5			2	5	516
3	2	3	12	2	8	3	54	4	3	3		1	1	12			2	5	1			282
2	2	4		1	5	4	3	2	3	2	1	1			47	1		3	6	1		512
5	11	4	1	6	10	1	1	1	3	2	2	10	5		1	15	4	5	23	3		432
1	1	5	31		2		3		9	1	1	1		5	1	2	7	2	4			489
4	5	4	3	2	14	4	2	1	7	1	1	8	2	3		1	5	231	4	2	1	482
4	1	4	12	2	9	17	2	3	7	3	1	1		2		3	6	30	4			348
5	10	1	3	21	2	1	2	6	16	2	3	8	6	3			2	3		2		301
10	9	23	5	9	4	2	9	2	10	2	1	5		9		1	2	4	1	6		470
3		2	12	4	3		5		16	1			2	4			5	5		2		253
8	1	7	10	1	3	2	10	3	1	1		2		1		1	3		1	2	2	296
1	5		7		2	14	1	1			1				278		4	2	7	4		471
5	31	4	1	2	3		2	10		4	23	8		8			1	5	2	2	3	386
4	41	8	1	10	5		1	1	11	3	2	13	12	3		2		6			13	335
3	8	7	5	2	12		32	2	9	1		15	6	1			6	5	5	2		393
3	2		27	2	1		1	3	3	1	1	1		4		2	6	1	1	1	2	449
4	10	3	5	1	4		4	2	5	5	32	7	3	4		1		7	5		1	353
7	1	5	5	5	5	2	1	3	2	3	4	4		1		2	2	4	1	2		290
5	2	8	5	6	8	36	3	1	2		1	6	2	5	9	1		4		1	1	262

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FORTY LEADING DOCTORATE INSTITUTIONS AND THEIR MAJOR BACCALAUREATE SOURCES

Doctorate Institution → ↓ Baccalaureate Institution		Columbia University	Univ. of Wisconsin	Harvard University	University of Chicago	University of Illinois	Univ. of Calif. (Berkeley)	Cornell University	New York University	University of Michigan	Ohio State University	Yale University	University of Minnesota	State Univ. of Iowa	Stanford University	Mass. Institute of Tech.	Univ. of Pennsylvania	Johns Hopkins University	Purdue University
UNIVERSITY OF DENVER	8410	39	10	9	34	21	20	5	11	23	6	8	7	18	12	7	2	3	6
WESLEYAN UNIVERSITY	1616	54	14	56	8	9	9	17	10	13	6	68	8	2	9	6	14	15	3
UNIVERSITY OF OREGON	9217	27	17	16	15	6	41	7	9	16	8	9	11	17	70			3	1
DUKE UNIVERSITY	5612	25	9	36	9	12	5	9	10	10	5	17	3	2	3	4	10	4	2
RENSSELAER POLY TECHNIC INST	2174	17	10	19	3	11	5	24	4	8	3	13	1	3	5	40	5	5	2
OHIO WESLEYAN UNIVERSITY	3144	36	28	21	26	16	5	10	11	19	95	23	2	9	4	1	8	2	5
UNIVERSITY OF ALABAMA	6325	58	5	14	15	4	8	4	18	7	14	6	1	7	4	5	11	10	3
UNIVERSITY OF BUFFALO	2193	30	9	12	14	8	4	28	9	11	6	17	7	4	3	6	8	8	10
UNIVERSITY OF TENNESSEE	6240	21	20	16	7	10	2	11	5	11	24	7	12	4	3	5	1	6	12
POMONA COLLEGE	9341	30	7	31	15	6	75	15	1	5	3	22	5		38	9	3	5	2
EMORY UNIVERSITY	5815	21	21	20	19	8	11	3	5	6	9	18	4	3	3	3	5	29	
UNIVERSITY OF CONNECTICUT	1615	22	14	15	2	18	7	30	12	7	16	39	8	4	4		12	4	13
OHIO UNIVERSITY	3143	28	17	8	12	21	1	11	13	17	95	4	8	10	1	1	1	3	8
AGR & MECH COLL OF TEXAS	7401	3	21	8	4	14	9	18		8	8	3	7	1	4	6		4	14
UNIVERSITY OF NEW HAMPSHIRE	1207	30	16	32	2	15	4	26	13	14	24	13	4	6	1	13	1	4	7
UNIVERSITY OF ARKANSAS	7120	14	20	17	18	28	8	23	2	8	7	5	9	8	3	6	3	4	11
REED COLLEGE	9215	31	7	25	25	14	28	11	11	7		6	3	3	28	4	1	4	3
UNIVERSITY OF GEORGIA	5841	24	14	12	8	15	4	21	6	7	17	8	8	1	2	1	2	6	7
STATE COLLEGE OF IOWA	4211	34	21	2	23	10	3	4	8	6	7	1	10	138	7	1			2
COLLEGE OF WOOSTER	3119	21	20	13	29	10	4	10	9	10	58	32	3	3	6	5	4	8	2
NORTH TEXAS STATE UNIV	7429	11	4	2	8	15	4	3	16	5	7	1	4	10	3	2	1	2	1
ST LOUIS UNIVERSITY	4332	5	6	5	11	10	11		2	11	2	10	4	4	3	2	1	6	4
VASSAR COLLEGE	2195	83	10	1	23	4	6	9	8	16	3	51	8	6	12		9	17	
WELLESLEY COLLEGE	1460	69	11	4	27	4	6	13	13	11	3	37	6	2	2	13	13	11	1
RICE UNIV	7434	14	7	15	8	15	8	10	4	10	1	10	4	3	6	11	4	4	4
UNIVERSITY OF IDAHO	8207	11	25	5	9	19	18	14	5	11	12	16	13	10	16	2	3	4	10
UNION COLLEGE & UNIVERSITY	2191	36	8	22	4	13	8	20	18	5	3	25	3	1	2	15	5	7	6
MOUNT HOLYOKE COLLEGE	1439	42	16	2	30	15	7	21	5	11	1	50	3	8	1	8	11	7	1
UNIVERSITY OF ARIZONA	8604	22	16	12	18	10	34	14	3	6	13	8	5	6	18	3	1	5	9
LEHIGH UNIV	2332	24	3	10	3	12	4	9	11	14	5	22	1	3	5	24	18	11	5
WILLIAMS COLLEGE	1463	40	6	88	14	3	4	8	1	9	1	36	2	1	1	20	8	14	3
TUFTS UNIVERSITY	1458	15	5	68	4	6	3	10	8	7	7	14	3	2	2	28	3	8	5
HAVERFORD COLLEGE	2324	19	7	58	9	3	7	14	8	7	4	19	1	2	1	7	48	9	2
FRANKLIN & MARSHALL COLLEGE	2318	26	5	10	4	8	2	7	17	4	4	6		1		3	41	14	2
BAYLOR UNIVERSITY	7406	14	16	12	21	3	3	2	2	6	5	10	3	9	4	2	6	6	5
QUEENS COL OF THE CITY OF NY	2173	44	17	10	2	13	10	7	43	6	6	17	9	4	5	4	5	2	4
BOSTON COLLEGE	1408	5	6	43	4	2	2	2	8	1	1	2	2	4	1	18	3	8	4

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Northwestern University	Iowa State University of Science and Technology	Indiana University	Princeton University	University of Texas	Pennsylvania State Univ.	Catholic Univ. of America	University of Pittsburgh	Univ. of So. California	Univ. of North Carolina	Univ. of California (L.A.)	University of Washington	Michigan State Univ. of Agri. and Applied Science	University of Missouri	Calif. Inst. of Technology	Fordham University	Boston University	Duke University	University of Maryland	Rutgers University	Syracuse University	University of Nebraska	TOTAL
14	5	5	2	4	3			9	4	4	4	4	3		1	4	1	3	1	3	4	319
10	6	3	24	1	5	1	3		2	2	3			4	1	8	5	1	3	5	1	409
4	4	4	4		2		2	11	2	3	27			6		1		2		2		347
7	2	2	12	3	5	1	4	4	21	2	1	2	1	3		3	127	5	2	1		383
2	1	2	12	1	5		4			3	3			6				2	1	4		224
3	2	10	6	1	2		7	3	3		1			1		14				4	1	379
9	3	6	7	9	4		2	1	19	3	3			1		3	10	3	2	2		281
5	2	5	7		7		4	2	4	3	1	2		1		2	11	3		12		265
4	8	5	3	8	2		2	3	12	2	1	11	2				7	4	1		1	253
	1	1	4	2				25	1	29	7	2		14		2	1	1		1		363
5		4	19	10	7		1		28	2				4		7	16	1			1	293
1	10	3	5		3	1	4		9	2	3	4		1		6	2	10	9	2		302
8	11	13		2	5		12	4	2	1	1	5	1			1	2	1		4	1	333
1	32		4	38	5		1	2	3	2	1	7	4	7			2	5	2		3	251
4	14	3	4	2	10	1	1	1	5		1	4	3		1	15	1	6	12	5	3	321
1	11	2	3	11	3	1			14		1	4	14	1			4	7	1	1	2	275
9	6	5	5	4	1		1	4	2	6	32		1	9		2	1			2	1	302
3	10	5	1	6	1		1		29			10				2	16	5	3	1		256
9	12	10		1	1		1	4		2		2	5				2				8	334
7	1	3	12	3	2	1	19	4	2			4				1	6	2			1	315
4	4	5	1	125	1			4	3			3	10	3				2				264
3	1	3	3	4	3	13		4	3	2	1	2	10	1	21		1	1				173
		1			2		2		2	3	2				1	1	1		2	1		284
5	1	2		2	1	2	3	4	4		2		1			4	2	2	1	1		283
5	3	1	7	37	1	1	3		1	2	1			7		1	4	2	1			215
4	11	2			9			5	6	1	18	4	4	3		1	4	3	1	1	1	281
7	2	6	14	2	4	1	1	1	4	1		3	1	1	2	1	2	2	5	10		271
4	1	3			1				1	1			2	1		3	3			1	1	261
6	7	1	1	7	5	1	1	12	2	9	2	4	1	13			4	1	1			281
4	3	5	11	3	12		3	1	2	2		2		7		1	1	3	7	1		252
2		2	21	1	3		5	1	1	2	1			9	1	3		2	2	3	1	319
1	2	1	3	2	5	1	2	4	5	3	1	2	1			30	2	3	2	2		270
2	2		23		3		3	1	6	4	5			9			1	2	4	3		293
18			19	2	30		23	3	3	1		4			1		2	10	4	2		276
3	1	3	1	81		1	1		5	3	2	1	2				5					238
9	1	2	12	1	5	1	2		4	1		4	2	1	5	1	2	1	1	9		272
1		2			4	31						1			47	31						233

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Doctorate Institution → ↓ Baccalaureate Institution		Columbia University	Univ. of Wisconsin	Harvard University	University of Chicago	University of Illinois	Univ. of Calif. (Berkeley)	Cornell University	New York University	University of Michigan	Ohio State University	Yale University	University of Minnesota	State Univ. of Iowa	Stanford University	Mass. Institute of Tech.	Univ. of Pennsylvania	Johns Hopkins University	Purdue University
ILLINOIS INST OF TECHNOLOGY	3341	6	25	9	31	10	7	1	3	11	6	3	4	1	5	6	1	1	9
POLYTECH INST OF BROOKLYN	2171	31	8	4	2	13	2	5	19	6	5	15	1	1		13	2	4	2
AUBURN UNIVERSITY	6302	21	17	2	9	15	3	7	3	5	28	1	6	2	1	3	2	7	17
SMITH COLLEGE	1451	57	11	1	21	6	10	7	9	9	5	43	3	4	2	1	7	10	2
UNIVERSITY OF MAINE	1111	15	13	19	2	8	4	36	13	12	10	15	9	4	5	13	1	7	7
VANDERBILT UNIVERSITY	6242	11	14	13	7	17	2	4	1	2	5	21	2	3	6	5	1	8	3
ST OLAF COLLEGE	4129	14	48	7	15	11	6	5	7	3	5	10	53	27	2	3	1	3	14
CLARK UNIVERSITY	1412	17	8	32	5	6	1	12	10	6	2	17	1	4	3	4	6	4	3
CARLETON COLLEGE	4104	18	24	17	17	18	11	11	4	8	4	26	34	12	8	4		10	2
SOUTHERN METHODIST UNIV	7436	22	8	20	13	13	8	1	10	9	2	7	6	1	8	2	3	9	8
VIRGINIA POLYTECHNIC INST	5436	5	19	4	6	12	2	25	1	4	7	2	2	1		7	1	7	11
SOUTHERN ILLINOIS UNIV	3383	8	7	1	5	76	2	4	7	3	6	1	6	15	2	1	3	1	8
MONTANA STATE UNIVERSITY	8108	16	15	7	9	19	16	4	6	17	6	5	14	9	7	4	7	5	5
BOWDOIN COLLEGE	1103	27	2	95	2	3	3	9	7	3	5	20	1	4	1	11	7	3	1
COLORADO STATE UNIVERSITY	8402	3	17	2	3	10	5	23	1	5	7	2	17		4	1	1	1	8
CASE INSTITUTE OF TECHNOLOGY	3109	6	4	7	8	21	9	6	1	3	23	10	3	2	7	18			10
LAFAYETTE COLLEGE	2330	27	5	16	6	6	2	6	18	7	6	22	3	3	4	4	28	9	3
MONTANA STATE COLLEGE	8106	6	15	3	11	10	14	12		7	5	2	25	3	8	4	1	2	7
COLORADO STATE COLLEGE	8405	29	10	2	6	5	7	11	12	4	6	6	9	14	30			1	2
COLLEGE AT ALBANY	2162	62	3	3	4	3		33	37	3	4	7	2	1	3	1	3	3	1
SAN JOSE STATE COLLEGE	9348	12	6	1	1	1	35	6			4	2			119				2
ANTIOCH COLLEGE	3102	14	11	13	10	5	9	5	6	11	44	4	7	7	7	5	1	6	12
TULANE UNIV OF LOUISIANA	7216	7	7	13	19	9	4	8	3	9	6	10	4	6	3	7	4	2	1
COLGATE UNIVERSITY	2115	26	11	26	8	6		25	18	6	6	17		4	3	2	5	10	
BATES COLLEGE	1102	26	3	38	9	17	2	5	11	2	3	22	2	7	2	7	2	5	3
BUCKNELL UNIVERSITY	2306	23	4	8	10	11	4	31	14	15	4	3	3	1	2	3	9	7	3
COLLEGE OF WILLIAM & MARY	5407	29	2	14	10	11	2	5	11	5	4	6		3	3	2	11	3	1
BRYN MAWR COLLEGE	2305	31	2	2	12	1	6	6	5	4		34	2			4	20	15	
MISSISSIPPI ST UNIVERSITY	6412	7	26	5	2	15	6	14	1	1	5	1	6	4	2	5	1	10	8
ALLEGHENY COLLEGE	2302	10	11	16	3	12	2	10	6	7	5	12	4	5	1	3	12	7	5
KANSAS ST TCHRS COLL EMPORIA	4711	20	11	1	17	5	8	3	6	5	11	1		26	9		1	1	1
RADCLIFFE COLLEGE	1448	28	11	5	5	3	9	5	6	5	2	10	2			1	5	4	
WHEATON COLLEGE ILLINOIS	3391	12	10	7	16	37		7	10	13	6	2	5	8	2		10	3	
ST JOHNS UNIVERSITY N Y	2183	23	6	1	1	4	1		47	1	2	1	2	1		2		2	1
DENISON UNIVERSITY	3122	20	7	16	22	4	1	6	5	8	54	6	2	4	1	1	4	8	1
INDIANA STATE TEACHERS COLL	3218	16	9	1	18	13	4	1	6	8	7	2	1	2	3		1	9	19
UNIV OF VERMONT & ST AGRIC COL	1309	37	5	14	6	7	4	29	6	3	7	9	3	1		5	4		5

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Northwestern University	Iowa State University of Science and Technology	Indiana University	Princeton University	University of Texas	Pennsylvania State Univ.	Catholic Univ. of America	University of Pittsburgh	Univ. of So. California	Univ. of North Carolina	Univ. of California (L.A.)	University of Washington	Michigan State Univ. of Agri. and Applied Science	University of Missouri	Calif. Inst. of Technology	Fordham University	Boston University	Duke University	University of Maryland	Rutgers University	Syracuse University	University of Nebraska	TOTAL
38			3	2		1		3		3	3	4		11			1	3				211
4	3		4	2	5		2			1	1			4	2		2	3	4	2		172
	13		1	4	3				15	1		4	4	1			3	4	1		7	210
1					2	4		3	1	1	1				1	1	1	1	1	2		228
2	5	4	1	1	13		1	3	1	2	1	4	2			11	5	5	7	4		265
6	1	1	11	4			2		8		2	2	2	3		1	8	1		1		178
6	5	4	2	1	4			2	1		2	5	1				2	2			3	274
1	1	2	6		2	1	3	1			3	3	1			17	4	3	1	1		191
9	6	1	4	1	2			2			1	2	3	4		1		2			3	269
5	8	1	1	38	1		2	1	6	2	2		2	4		2	5					230
2	17	1	3	1	14	1	4	1	16			9	1				8	5	4			203
13	7	26		3	3		2	1	1	3	2	3	7				1				2	230
5	5	7	4	2	2		3	5	1	6	10	2	2	1			2	4		2	3	237
1		6	10	1	2	2	1	1	5						1	3		1	1	3		242
2	22	2			3		1	3	5		1	9	2	2			1	2	7	2	8	182
1	6	1	4		3		4							6						2		165
4	5	2	11		9	1	6	1	1			1			1			4	6	3	1	231
3	28	1	1	1	6	1	3	1		2	6	3	2	8				1	1	1		204
2	9	3		1	3		1	8		2	2	3	3				1	3		1	2	198
2		3	1	1	2		1		1			2	2		3	1		1	1	22	1	217
2	2	1						11		10	4	2				2	2	3		1	1	230
9		5	4	2	3		1	3	6	1	1	2		2		1	1		1			219
5	1	1	5	7	1	1	2		6					2		2	2	1		1	1	160
2	1	3	5	1	6	1	1		1					2	1	3	2	1	4	8		215
1	1	1	2	1	3			2		1	1		1	1	1	14	2		4	4	1	207
5	3		4	1	23	2	12	1	2				1	2			1	2	7	1		222
7	1	6	6	2	1	3	1		15			1	1			3	9	5	2		2	187
2		2			1					1						1	1					152
5	16	3	1	2	5				10			8	5	1			8	6				189
8	3	3			7	1	35	1			1	2		2		12	4	1	2	2	1	216
11	2	3	1	2	2	1		4		1		1	6						1		2	163
		1			1	3	1	1	1	1			1		1	5				2		119
19	3	4	2	1			1	6				1				1		3	1			190
		1	1			5	2	2	1		2	1			55			5	1	1		172
5	3	3	4		1		5	1	1	1	1	2		1	1	2	2	1	1	2		207
7	1	74			2		1	2	2				1							1		211
1	3	1	9	1	10		2		2			5	2			3	2	3	4	5		198

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Doctorate Institution → ↓ Baccalaureate Institution		Columbia University	Univ. of Wisconsin	Harvard University	University of Chicago	University of Illinois	Univ. of Calif. (Berkeley)	Cornell University	New York University	University of Michigan	Ohio State University	Yale University	University of Minnesota	State Univ. of Iowa	Stanford University	Mass. Institute of Tech.	Univ. of Pennsylvania	Johns Hopkins University	Purdue University
GRINNELL COLLEGE	4210	24	8	7	15	15	6	4	3	5	2	6	8	34	9	3	3	3	6
CLEMSON AGRI-CULTURAL COLL	5708	2	13		2	9	1	21		4	11	3	8	1		1		2	10
ILLINOIS STATE NORMAL UNIV	3342	19	6	2	17	53	2	1	6	5	5		1	19					3
SW MISSOURI STATE COLLEGE	4329	13	10	1	3	8		1	16	1	3	12	2	13	7				2
LOYOLA UNIVERSITY ILL	3354		8	2	15	13	4	1		2	3	2	2	3	6	4			2
GEORGIA INSTIT OF TECHNOLOGY	5820	11	10	3	2	6	4	2	3	7	5	6	2	1	2	26	3	5	3
UNIVERSITY OF RICHMOND	5432	22	3	17	10	4	1	6	4	5	4	4	5	2	1	1	7	30	
UNIVERSITY OF NEW MEXICO	8508	11	6	13	10	6	18	3	3	10		6	3	6	9	3	4	4	3
HOPE COLLEGE	3414	4	7	5	8	27	1	4	7	39	19	6	7	7		2	4	3	8
WABASH COLLEGE	3239	11	9	12	10	28	3	12	5	3	8	4	5	4	6	1		7	16
HAMILTON COLLEGE	2125	30	2	21	3	4	3	30	12	3	1	17		3	2	2	4	5	1
UNIVERSITY OF SOUTH CAROLINA	5727	10	4	9	8	5	4	4	4	1	6	7	2		2	1	3	4	5
CORNELL COLLEGE	4206	23	18	8	11	14	1	6	2	3	3	5	7	44	3			1	4
MARQUETTE UNIVERSITY	3512	2	43	5	6	9	4	1	4	7	2	1	8	3	3	2	1	4	4
LAWRENCE COLLEGE	3510	11	41	7	9	19	2	7	1	11	3	6	12	8	2	2	1		2
TEXAS TECH COLLEGE	7455	7	5	2	3	1	5	6	1	3	7	2	2	9	4	6	1	1	2
UNIVERSITY OF WYOMING	8301	17	16	3	10	4	7	7	4	5	3	7	10	10	6	1		1	3
MIDDLEBURY COLLEGE	1306	27	5	19	1	7	2	12	6	9	3	14	3	1	4	9	5	5	1
GEORGE PEABODY COLL FOR TEACH	6210	24	2	2	5	1		3	10	2	2	2		1	1			1	1
WESTERN MICH UNIVERSITY	3431	12	11	2	12	2		4	6	56	11		3	4	2			1	5
BARNARD COLLEGE	2118	101	1	2	3		6	4	8	3		11	2		2	3	4	9	
UNIVERSITY OF NORTH DAKOTA	4410	10	25	6	8	11	4	2	2	9	3	5	14	11	6			5	3
S DAKOTA ST CO OF AG & MECH A	4508	1	38	4	6	7	4	8	1	1	6	1	28	6	3				7
DAVIDSON COLLEGE	5611	13	1	5	4	2		9	2	2	3	13		2	1	3		8	1
KENT STATE UNIVERSITY	3130	12	6	3	6	8	1	6	4	5	46	1	4	3	1	1	1	1	7
OCCIDENTAL COLLEGE	9336	18		11	6	2	20	4	4	1	3	5		2	16	3	2	3	2
BEREA COLLEGE	6102	7	6	5	8	4	1	5	4	8	6	8	1	7	2		2	1	9
DRAKE UNIVERSITY	4208	19	5	6	17	5	3	2	1	2		9	8	35	3		3	1	1
UNIVERSITY OF AKRON	3155	6	13	5	9	6	1	6		4	29	5	4	3	2	2	5	2	9
NORTH DAKOTA STATE UNIV	4402	6	21	1	9	4	3	10			6	1	31	5	1	6	1	3	7
CENT MISSOURI STATE COLLEGE	4302	17	3	2	5	4	1	1	1	5	2	2	3	9	3				
UNIVERSITY OF RHODE ISLAND	1508	10	13	6		5	1	19	3	1	5	10	7			2	2	2	10
UNIVERSITY OF PUERTO RICO	9810	29	6	7	15	1	3	14	11	13	7		7				7		5
BUTLER UNIVERSITY	3204	8	11	3	10	13	1	4	4	5	7	12	4	7	1			3	12
KALAMAZOO COLLEGE	3415	6	8	8	13	11	3	3		26	7	2		5	2		1	4	5
KANSAS ST COLL PITTSBURG	4712	7	3	2		2			2	1	9	1	1	9	3		2		4
DICKINSON COLLEGE	2313	16	4	3	3	4	1	5	11	5		5	2	1		3	24	9	1

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Northwestern University	Iowa State University of Science and Technology	Indiana University	Princeton University	University of Texas	Pennsylvania State Univ.	Catholic Univ. of America	University of Pittsburgh	Univ. of So. California	Univ. of North Carolina	Univ. of California (L.A.)	University of Washington	Michigan State Univ. of Agri. and Applied Science	University of Missouri	Calif. Inst. of Technology	Fordham University	Boston University	Duke University	University of Maryland	Rutgers University	Syracuse University	University of Nebraska	TOTAL
11	4	2	2	1	3		1	1	2		2	1		3			1			1	1	197
	17	3	3	1	8		1		23			8	2				3	4	13	1	1	176
16	1	8			2		1	2		1	2	1	10			1	1			2	5	192
2	2	2	1	2				6				1	67	1		1	1	1			2	181
24	2	2	1	1		11		2				2	1	1	14		1	1			1	131
2	3	1	3	4	4	1	2	1	8		1			6			3		1			141
		1	4					2	13	1			1				17	1	1	1		168
	2	3	1	6	1		2	8	1	7	2	1	2	1					1	5	2	163
11	3	5		1	1		2					12	2				1		1	3	1	201
9	3	18	1		2		1			1		2					1	3	1	1	1	188
3		3	21	2		2		3				1				1			1	9		189
		1	5	2	1		3	3	21	2	1	1					10	4		1		134
10	5	2	3		1	1	1	3			1	2				4	1	1			1	189
9	8	2		1	1	12		2				3			5			4			1	157
20		5			2			1	1	1	1	1	2	1			3	1	1	4		188
4	8	2		51			1	1	3			5	1	1				1			3	148
1	2	2	2	1				7	1	1	5	2			1	1			2		6	148
2	3	2	2		3				1	2		1				4	3	1	1	7		165
3		1		3				1	4	1		4	2									76
5	1	7			3	1		2			1	23	1		1		1					177
		2						1	1	1					3			2	3	1		173
3	2	1	1		2		1	2	1	1	3		2		1	1		1			2	148
3	23		2		2			1		1	1	4	2					2		1	1	164
2	1	1	7	1	2			1	46				1				20	1	1			153
4		3		1	3	1	7		1	1	1	8					4	3	1	1		155
2			4					36	1	19	7		1	5		2					1	180
2	6	4		1	1			1	12	3		4	4	1		1	5	2		1	2	134
3	13	5		1		1		5	2	2	1	1		1		3	2	1			3	164
4	2	3	6		3		5	3	2								1	1			1	142
1	19	1			2		1			4	4	8					1	4	1		1	162
1		6		1	1			2	1	2		1	70				1				5	149
2	6	1		1	4		1		5			2	1			8	2	6	14	2		151
		1		3	9		2		3	1		3	1		3		2	1	3	1	1	159
	1	34		1	5	2		1				3		1		1	3		2	1	1	161
2	3	3	1	2	3							10					1		1	2	1	133
3	8	6		3	1		1	2	1	2		2	18			1	1	1				96
2			6	1	21		10	1	4			1				5	3		3			154

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Doctorate Institution → ↓ Baccalaureate Institution		Columbia University	Univ. of Wisconsin	Harvard University	University of Chicago	University of Illinois	Univ. of Calif. (Berkeley)	Cornell University	New York University	University of Michigan	Ohio State University	Yale University	University of Minnesota	State Univ. of Iowa	Stanford University	Mass. Institute of Tech.	Univ. of Pennsylvania	Johns Hopkins University	Purdue University
UNIVERSITY OF MIAMI	5911	7	4	5	3	7	4	4	2	8	3		3	4	1		2		6
SAN DIEGO STATE COLLEGE	9344	4	3	2	2	4	30	3		2	1	2	3	5	22			1	2
UNIVERSITY OF LOUISVILLE	6125	9	4	6	16	7	2	4	2	3	9	7	6	2		3	5	1	3
BELOIT COLLEGE	3503	11	47	9	20	11	2	1		4	1	4	8	9	1	1		2	1
HOWARD UNIVERSITY	5309	22	5	6	15	4	1	6	16	9	9	1	2	1	2	2	14		1
LONG ISLAND UNIVERSITY	2138	28	4	1		4	1	6	41	4	5	2		5	1		6		5
EASTERN MICHIGAN UNIV	3419	15	3	3	3	2	1	2	3	89	8			1	2				1
BIRMINGHAM-SOUTHERN COLL	6310	5	9	3	8	3	1	1	2	5	2	3	2	3	2		4	8	3
GETTYSBURG COLLEGE	2321	8	2	4	7		2	6	5	6	3	10	1		1	1	23	14	2
UNIVERSITY OF REDLANDS	9357	6	1	5	6		14	3	2	4	1	6	3	4	18	1	1		1
CALVIN COLLEGE	3405	3	5	12	10	15	1			44	1	3		1		1	1		12
GEORGETOWN UNIVERSITY	5308	8		14	2	1	3	2	3	1	1	6	3	1		2	3	7	
MUHLENBERG COLLEGE	2344	10	3	5	2	5	2	9	11		4	5	2	3			33	5	2
NEBRASKA WESLEYAN UNIVERSITY	4615	12	2		8	2	2	3	2	4		1	11	8	4				2
COLORADO COLLEGE	8403	7	1	8	7	10	12	10	2	2	5	9	4	5	3	4	2	6	2
ALBION COLLEGE	3402	5	13	2	9	10	5			47		5	1	6	5		1	1	2
GOUCHER COLLEGE	5204	14	4		7		2	7	3	3	2	12		3		1	12	60	
KNOX COLLEGE	3347	8	13	5	8	38	3	2	4	3	1	5	4	16	2		1	1	4
JUNIATA COLLEGE	2327	11	2	6	6	4	1	4	2		6	11	1		2	7	22	1	1
SPRINGFIELD COLLEGE	1452	21	2	4	3	5	1	1	40	2	2	2	1	6	1	1	1		1
WAKE FOREST COLLEGE	5642	8	5	7	4	2		7	1	4	1	7					1	3	
TRINITY COLLEGE CONNECTICUT	1613	15	4	13	6	3		1	4	1	4	22	1	3		7	4	7	1
MANHATTAN COLLEGE	2140	16	3		1	2	2	1	25		2	4		1	2	1	1		4
PARK COLLEGE	4325	10	10	2	15	8	4	4	3	11	3	6	4	10	2		5		3
AUGUSTANA COLLEGE ILL	3307	3	14		16	20	6	4	2	4	1		6	42	3		2	1	
DEPAUL UNIVERSITY	3329	6	4	3	14	8	1		2	6	1		1						2
MANCHESTER COLLEGE	3222	3	15	1	18	7		2	1	3	27	2		2	1		2	3	26
NE MISSOURI ST TEACHERS COLL	4322	8	4		6	5		4	3	1	2	1	3	22	1				
WASHINGTON & LEE UNIVERSITY	5441	16	4	8	3	3	1	6	1	3	11	8	6		2	2	8	14	
COOPER UNION	2119	18	2	4	4	5	3	4	18	10	1	1		1	1	10	4	5	
STATE UNIV OF SOUTH DAKOTA	4511	3	12	5	8	7	5	2	1	4	4	5	6	20	4			1	3
TEXAS CHRISTIAN UNIVERSITY	7450	5	2	3	7	1	6	2	2	1	1	4	1	1	3	2	3	4	1
NORTHEASTERN UNIVERSITY	1440	4	4	17	2	1	3	2	3	2	4	9	2			15	2	2	2
WILLAMETTE UNIVERSITY	9220	8	10	3	2	3	10		5	2	5	5	5	4	13	3	1		
UNIVERSITY OF HAWAII	9501	9	15	9	4	7	11	9	7	2	6	5	7	1	4	2	1	4	5
YESHIVA UNIVERSITY	2199	34		9	1			2	12	1		3	1			7			
EARLHAM COLLEGE	3208	9	9	7	22	14	1	1	1	3	10	3		1	3		8	3	8

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Northwestern University	Iowa State University of Science and Technology	Indiana University	Princeton University	University of Texas	Pennsylvania State Univ.	Catholic Univ. of America	University of Pittsburgh	Univ. of So. California	Univ. of North Carolina	Univ. of California (L.A.)	University of Washington	Michigan State Univ. of Agri. and Applied Science	University of Missouri	Calif. Inst. of Technology	Fordham University	Boston University	Duke University	University of Maryland	Rutgers University	Syracuse University	University of Nebraska	TOTAL
2	1	3		6	3	1	2	3	5	1		2		1			7	1		1		102
1	2	1			2			25		21	7	1		2				2				150
2	5	12		1			3	2			2	1	1				1	1				120
8	1	3			1				3	2	1						1	1		2		155
4	1	1		1	6	8	5								1	1		1	1			146
2	1	3	4	2	3				1						3	2		2		3		139
4	1	1		1	1			1			1	10						1		1	1	156
6				4	2		1		11	1						2	6					97
1		1	9		15		7				2	1					2	4	4	2		143
3	1	1			1		1	42	2	12	10	1		2		4	1	2				159
6		4	2					2			1	20	2			1	4				1	152
	1		1		3	13			3	1	1				13			4				97
	1		3		6		4		2		1						1	1	4	2	2	128
12	7	1		1			1			3	2		2			4	2	2		1	52	151
1	2	3	5	1	2		2	4		2	1		2	2	1		1	1		2	1	132
10	2							2	1		1	15	1			3	2				1	150
1		2					1	2	1				1				1	2				141
3	2	6	3	1	1		1		1				1			1	1					139
5			2		30		13		1			1				3			8			150
1		2	1		2		6	2	2	1						8						119
		2	2	1	1		1		46				1			1	28		1	1		135
5	1	1	8	4	3	1	3	1	1			1	2		4	3	1		2			137
	1		1	1		19	1		2		1				34	1		2	2	4		134
9				1	2		2		2	1	1	3	9				3				3	136
5	1	2		2				1	1			1	1								2	140
23		4				21	1					2	1		5	1						106
5		21			1		1	3	1			3				1	1					150
	4	4		1	2	1		5		1	1	1	48					2			2	132
3		2	6	1	1		1		7	1							4	2				124
1		1	1		2	2	1	1						4	1			2		2		109
6	6		1		1		1		1	2	2	2	5	1				4				122
1		3	8	31			1	2	3		1	1		1			7					108
1				1	4				1	2	3	4	1	1		25	2	2		1		122
1	1	1			3		2	4		1	9	4		1		4	2			1		113
3	4				1				1		4	2		2		1		1		1		128
			1				6			1		1			1	4	1	2		1		88
1	3	8	2		1		3	1	2		1	2				2	2					131

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FORTY LEADING DOCTORATE INSTITUTIONS AND THEIR MAJOR BACCALAUREATE SOURCES

Doctorate Institution → ↓ Baccalaureate Institution		Columbia University	Univ. of Wisconsin	Harvard University	University of Chicago	University of Illinois	Univ. of Calif. (Berkeley)	Cornell University	New York University	University of Michigan	Ohio State University	Yale University	University of Minnesota	State Univ. of Iowa	Stanford University	Mass. Institute of Tech.	Univ. of Pennsylvania	Johns Hopkins University	Purdue University
UNIVERSITY OF MISSISSIPPI	6417	7	6	4	4	10	2	7	1	5	5	5	1	2	2		1	8	2
BOWLING GREEN ST UNIVERSITY	3104	7	6	3	3	1	2		3	10	48	2	1	2	1			1	3
COE COLLEGE	4205	13	3	2	6	7	2	4			5	1	3	55	1	1	2	2	3
COLLEGE OF THE HOLY CROSS	1413	9	6	9		2		4	10	1	3	7	2			3	3	3	
LEBANON VALLEY COLLEGE	2331	12	4	2	5	1		3	5	2	4	7			1	1	11	6	
MUSKINGUM COLLEGE	3138	10	3	1	5	4	1	1	2	4	57	1	1	1	1		2	1	
SE MISSOURI STATE COLLEGE	4327	8	6		4	5	1	3	1	1	1	1	3	11			1		2
UNIVERSITY OF DAYTON	3154	3	1	1		3		3		2	25		1			2		1	7
UNIVERSITY OF DELAWARE	5103	11	5	3	1	9	1	5	1	4	6	3	8			5	14	3	4
WESTERN KY STATE COLLEGE	6129	7	14	2	1	9		2	2	4	7	2	1	2			3		4
ROOSEVELT UNIVERSITY	3377	4	7	1	22	21	2		2	1		1	1	2				1	4
FURMAN UNIVERSITY	5718	14	3	4	5		2	10	3	2	4	7	2	1		1	2		1
NORTH CENTRAL COLLEGE	3365	3	11	2	8	36	1	4	4	1	4	3	7	6	1		2	1	
WASHINGTON & JEFFERSON COL	2391	5	5	4	1	2		3	2	3	2	9		1	1	4	4	8	2
COLLEGE AT BUFFALO	2148	17	4	1	7		1	14	8	3	5	1	1		3				
MONMOUTH COLLEGE ILL	3360	11	9	2	10	27	1	2	2		6	2	2	15	1	1		2	4
ALFRED UNIVERSITY	2102	8	7	3	4	5		7	10	2	7	4				15	1	1	2
GONZAGA UNIVERSITY	9104	3	4	4	3	1	10				4	2	1		3		1	2	1
WHITMAN COLLEGE	9116	12	7	5	8	6	11	2		1	1	8	7		11			1	
UNIVERSITY OF WICHITA	4718	4	9	6	5	15	2	2	1	2	7	2	5	9	4		2		
MARYVILLE COLLEGE TENN	6221	6	2	1	8	3	2	5	4	3	4	5	1	3	1	1	5	3	1
URSINUS COLLEGE	2387	8	1	1	4	5	1	2	7	2	2	1	2			2	35	4	3
FLORIDA STATE UNIVERSITY	5907	12	1		7	4		1	5	5	5	2	1	4			1	4	1
HAMLINE UNIV	4114	7	5	1	1	3	3	2	2	2	2	1	52	5	2	1		3	1
WITTENBERG UNIVERSITY	3163	6	4	5	6	2	2	2	2	3	47	2	2	3			1	9	3
UNIVERSITY OF DETROIT	3429	1	7	2	7			2		22	5	3	1	1					3
CENTRAL METHOD COLLEGE	4301	8	2	1	5	17	4			1		1	1	7	4		1	1	2
U S MILITARY ACADEMY	2190	5		4	2	13	5		3	3	8	4	3	4	5	11	4	2	2
WORCESTER POLY-TECHNIC INST	1464	2	5	5	1	6	4	5	11	6		14	3			14	2		6
BALL STATE TEACHERS COLL	3203	1	3	1	6	5		1	1	1	5		2	6	2	1	2		12
DUQUESNE UNIVERSITY	2316	2	3	1	1	1	1	1	2		4		4			2	1		2
HIRAM COLLEGE	3128	5	8	4	10	3	1	10		5	17	9	2		3	1	1	1	4
PHILADELPHIA CO OF PHARM & SCI	2365		9	2		3	2	5		1	2	3	1		1	1	23		8
LUTHER COLLEGE	4216	5	11	3	5	6	1		1	9			18	28		1		3	
SOUTHWESTERN COLLEGE	4720	7	9	1	10	9	2	1	1	3	1	2	3	4	1		3	4	
HOBART & WM SMITH COLLEGES	2112	12	4	14	4	3		22	4	2	4	4	1	3		2	1	2	1
MARIETTA COLLEGE	3133	9	8	3	5	5	2	3	3	1	28			7			2	1	3

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Northwestern University	Iowa State University of Science and Technology	Indiana University	Princeton University	University of Texas	Pennsylvania State Univ.	Catholic Univ. of America	University of Pittsburgh	Univ. of So. California	Univ. of North Carolina	Univ. of California (L.A.)	University of Washington	Michigan State Univ. of Agri. and Applied Science	University of Missouri	Calif. Inst. of Technology	Fordham University	Boston University	Duke University	University of Maryland	Rutgers University	Syracuse University	University of Nebraska	TOTAL
2		7		5		1		1	10		1		1				7					107
2		6		1	2		2	5	1		1	12	2					1			1	129
5	5	1	1	1	1		4		1		3			1							2	135
	2		3			15	1	1				1			13	10	1			2		111
	2	1	3		17		10	1					1			1	1	2	2	1	1	107
4	1	2	1		2		20					3								2		130
5	14	3		1				2	1			1	39			1	1				1	117
3	5	1		1	1	19	9		1	1		1			8							99
2	1	1			7	2		2	7		1	1					1	7	3	1		119
3	2	14		1			1	1	3			2	2						1		1	91
19		4		1	3		1	5	1	2	1	2				1				1	1	111
			2	2					23			1		1			13				1	104
17		1	1					2			1	5	2			4			1		1	129
1		2	1	1	5		43	1	3				1	1		1	2	1	1	1		121
					5		1					2				1				11	1	86
4	3	4	2	1	2		4	1		1		1	1				1				1	123
1		1		2	17		6	1	1			2		2	1		1		2	5		118
1			2			11	1			1	14				11						1	81
			1	2				3		1	14			8		2						111
10	2		1	2				3	1				1			1	1			1	1	99
3	1	9	1	1			3	1	9				1			1	3		2		1	94
			1		5		5						1		1		2		2			97
4		5		1	2				7	1	3	1					4			2		83
5	3		2		1		1				2	1				6	1	1			5	121
4	1	2					4	3	2	1		1				2					1	120
5	11					6			2	1		13			4			1		2		99
2	9		2				2			1	1		20			1	3	2			6	104
	3		6	1	1	2			1	1				1				1		1	1	97
	1	1	4		1	1				2	1	2		1		1			2			101
3	1	51			3			1		1		3	1							2		115
1			1	1	5	8	50					2		1	3		1	4	1			103
2		3	1	1	1	1		1						1			1	1			1	98
	1				4		2						1		1			2	1			73
1	9				1		2	2	2	1	1	2							1		1	114
4	3	2					3	3					2			2		1			2	83
2	2	1			2	1	1		1				1			1	2		2	2		101
1		1	2		2		4	1	1		1	2	1	2		1	1	1				101

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FORTY LEADING DOCTORATE INSTITUTIONS AND THEIR MAJOR BACCALAUREATE SOURCES

Doctorate Institution → ↓ Baccalaureate Institution		Columbia University	Univ. of Wisconsin	Harvard University	University of Chicago	University of Illinois	Univ. of Calif. (Berkeley)	Cornell University	New York University	University of Michigan	Ohio State University	Yale University	University of Minnesota	State Univ. of Iowa	Stanford University	Mass. Institute of Tech.	Univ. of Pennsylvania	Johns Hopkins University	Purdue University
UNIV OF CALIF SANTA BARBARA	9368	3	2	6		3	13		1	1		2		1	19			1	1
UNIVERSITY OF TOLEDO	3157	5	5	6	3	8	1	3	2	20	23	2	2	4	1	2	1	1	9
EASTERN ILL UNIVERSITY	3330	1	4	3	3	35		1	2	3	11		2	11					4
BAKER UNIVERSITY	4701	11	3	3	11	5	1	2	2			1	2	5	2		2	4	
WILLIAM JEWELL COLLEGE	4343	5	3	4	6	2	1		1	1	4	4	3	5	2	4	1		7
U S NAVAL ACADEMY	5224	4	3	4	3	10	9			5	3	7	1		7	8		4	2
KENYON COLLEGE	3131	2	5	8	2	3	1	3	1	8	8	7	3	3	3	4	5	8	1
BRADLEY UNIVERSITY	3310	3	8	3	5	21			3	1	4		3	8	4		2		5
MOUNT UNION COLLEGE	3137	7	2	3	5	1				2	25	1		1	1		1	7	13
WOFFORD COLLEGE	5730	7	1	5	3	1	1	3	1		2	4		1	1			2	1
CREIGHTON UNIVERSITY	4603	3	4	1		2	3		1	2		1	1	10	1	1	4	1	4
FRESNO STATE COLLEGE	9318	3	1	1	3	1	24	3		3	2	2	1	2	20		1	1	
BALDWIN-WALLACE COLLEGE	3105	7	4	3	2	2	1	2	2	5	25	4	1	2	1		1	4	1
NORTHERN ILL UNIVERSITY	3367	7	15		4	12	1			2			1	9	4				6
VALPARAISO UNIVERSITY	3236	3	5		11	3	2	2	1	4	4	4	1	5	4	2	1	2	7
CENTRAL MICHIGAN UNIV	3407	6	2	1	2		3	1		37	5		2	3	3		2		
COLBY COLLEGE	1104	12	4	21	2	4		2	7	2	2	10		1		5	3	3	
DREW UNIVERSITY	2230	12	1	2	1	4	1	2	10	3	4	9	2	3	3		4	2	4
ST LAWRENCE UNIVERSITY	2186	11	3	3	4	1		8	11	2	2	3	1	1	2	3	1	1	
WASHBURN UNIV OF TOPEKA	4728	11	8	1	12	4	1		4	4	3	4		5	2		1	2	3
MISSISSIPPI COLLEGE	6409	1	5	4	3	2		1	4		2	6		3		1	1	1	
GROVE CITY COLLEGE	2322	5		1	3	1		4	5	2	7	1	1	2	2		2	1	2
HASTINGS COLLEGE	4607	8	9	4	6	3		3	1	1	1	6	2	8	3		2		2
CANISIUS COLLEGE	2107	3		3				4	3	1	5			1		1			5
OTTERBEIN COLLEGE	3145	3	2	1	5	2			1	3	54	6			1			1	2
UNIVERSITY OF SCRANTON	2386	2	3	1	4		1	2	2	1	1	1	1				3	1	4
VILLANOVA UNIVERSITY	2389	6		2	1		2	2	2	2		2	1			2	25	3	
EAST TEXAS ST COLLEGE	7415	5			2				2		2	1		1			2		2
GENEVA COLLEGE	2320	3	3	2	5	2				5	4	4		2			1	1	
ILL WESLEYAN UNIVERSITY	3343	6	8	1	8	29	1	1	2	2		1		4					4
MACALESTER COLLEGE	4116	8	7	2	6		2		2		1	3	29	3	2	1		2	1
SAN FRANCISCO STATE COLLEGE	9346	5				2	17		1		2	2	1	2	44				
SW TEXAS STATE COLLEGE	7440	4	1	1	2	3			2		3			6		1			
COLLEGE OF ST THOMAS	4109		8	1	2	2	1	1		2	2	2	28	5	1				2
MONTCLAIR STATE COLLEGE	2217	32	2	6		1		2	25		2	1					1	1	
UNIV OF S WEST LOUISIANA	7215		2	1	1	4		4	1		2	1	4	2		1			1
DRURY COLLEGE	4310	7	4	4	11	3	5	2	5			2	1	3	2		1	1	

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Northwestern University	Iowa State University of Science and Technology	Indiana University	Princeton University	University of Texas	Pennsylvania State Univ.	Catholic Univ. of America	University of Pittsburgh	Univ. of So. California	Univ. of North Carolina	Univ. of California (L.A.)	University of Washington	Michigan State Univ. of Agri. and Applied Science	University of Missouri	Calif. Inst. of Technology	Fordham University	Boston University	Duke University	University of Maryland	Rutgers University	Syracuse University	University of Nebraska	TOTAL
2	1			1	1			26		17	1			1			1	1				105
3		2	1	1			3	1									1	1		2		113
4	5	5			1				1			3	5				1			3	2	110
9	2	2			1		1	5					1	1		12	2				4	94
4	5	1	3		1		1	1	1		3		13			3	2	1				92
1		2	3	2	2	1	1	1	1	4	1			2				2	1			94
	2	2	6		1		2	2			2	1	1			1				1		96
2	5	5			1		2	2		2		4	1			1						95
1	2	1	1		2		2		1		1					7			1	3		91
1		1	2	2	2				26							1	10	1				79
2	3	1				19	1	1					4		3			1			14	88
3				1				14		6	3		1	1								97
3	1			1	2		1		3			1	1	1		5						86
15	4	8			2			2		1		4						2	1		1	101
2	4	13		3	1	1	1	2			1		1		1		1					92
2		3			1							21						1		3	1	99
					1		1		1				1	1		11	1		1	1		97
1			1		1		2		1					1			1	2	5	3	1	86
	1	1			3		1		3	1			1	1	1	1		1	1	11		84
5		1		1			1	2	1		1		1				1					79
	1	5		10	1		4	1	18	1						1	1	1		1		79
	1	1			7	1	35	2				1				2	2	1	1			93
2		1	1					3			4						1		1	1	20	93
		2	1		1	12	2								13		1	1		3		62
	2	1		1	2		4	2	1		1	1				2	1					99
	1				12	19	5								9		2	2	2	3		82
	1	1	4		2	20	2						1		6			2				89
1				46	1		2	2				2	2				1	1		1	1	77
		1			4		54							1			3	1				96
9	2	4		1	1			2		1		1								1	1	90
5	7		1	1			1	1			1								2	1		89
1		2						8		2	5	1				1						96
	1	1	1	51			1					3						2	1			84
2	4			1		7				1	1	1	2					8			8	92
1		1	1		3				1						1	1		1	13			96
	9			6	1		1		1	1			1				1					45
6	1	3	1					1				2	13	1					1			80

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FORTY LEADING DOCTORATE INSTITUTIONS AND THEIR MAJOR BACCALAUREATE SOURCES

Doctorate Institution → / ↓ Baccalaureate Institution		Columbia University	Univ. of Wisconsin	Harvard University	University of Chicago	University of Illinois	Univ. of Calif. (Berkeley)	Cornell University	New York University	University of Michigan	Ohio State University	Yale University	University of Minnesota	State Univ. of Iowa	Stanford University	Mass. Institute of Tech.	Univ. of Pennsylvania	Johns Hopkins University	Purdue University
FORT HAYS KANSAS ST COLL	4709	1	2	2	1	3		1		2	2		1	11	2				9
MISSOURI SCHOOL OF MINES & MET	4345	1	4	1	1	9	1			2	3	1				5			3
RANDOLPH MACON COLLEGE	5423	6	1	5	6	3			1	2	1	2	1			1		10	
TOTAL		9772	6064	6354	5731	5027	5264	4504	4684	4473	4337	4384	3690	2936	2882	2716	2694	2324	2275

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FORTY LEADING DOCTORATE INSTITUTIONS AND THEIR MAJOR BACCALAUREATE SOURCES

Northwestern University	Iowa State University of Science and Technology	Indiana University	Princeton University	University of Texas	Pennsylvania State Univ.	Catholic Univ. of America	University of Pittsburgh	Univ. of So. California	Univ. of North Carolina	Univ. of California (L.A.)	University of Washington	Michigan State Univ. of Agri. and Applied Science	University of Missouri	Calif. Inst. of Technology	Fordham University	Boston University	Duke University	University of Maryland	Rutgers University	Syracuse University	University of Nebraska	TOTAL
1	1	1		1				1				1	3		1			2		1	10	60
	3			3	3		3		1	1	1		15	1				4	2	1		69
			3			1	2		3					2		2	6			2		60
2124	1931	1811	1994	1837	1732	1266	1726	1530	1468	1579	1292	1268	1142	1187	804	929	1000	1018	901	851	650	110151

Appendix 8

STATES AND REGIONS OF BACCALAUREATE ORIGIN FOR FORTY LEADING DOCTORATE INSTITUTIONS: PHYSICAL SCIENCES

		Columbia University	Univ. of Wisconsin	Harvard University	University of Chicago	University of Illinois	Univ. of Calif. (Berkeley)	Cornell University	New York University	University of Michigan	Ohio State University	Yale University	University of Minnesota	State Univ. of Iowa	Stanford University	Massachusetts Inst. of Tech.	Univ. of Pennsylvania	Johns Hopkins University	Purdue University
MAINE	11	10	4	37	8	3	3	10	3	3	7	8	1	3		32	3	6	5
NEW HAMPSHIRE	12	28	11	34	23	6	5	18	10	11	10	16	7	2	3	33	3	5	5
VERMONT	13	17	4	5	7	2		9	3	3	4	5	2		2	14	4	2	4
MASSACHUSETTS	14	163	51	526	101	78	88	63	38	78	23	118	26	6	44	997	26	66	49
RHODE ISLAND	15	10	10	26	18	6	7	17	3	1	6	26	5		4	27	4	5	7
CONNECTICUT	16	25	14	47	25	16	27	14	15	13	10	370	6	1	22	46	6	8	9
NEW ENGLAND		253	94	675	182	111	130	131	72	109	60	543	47	12	75	1149	46	92	79
NEW YORK	21	855	113	172	196	84	108	498	595	127	120	198	42	36	74	335	80	91	139
NEW JERSEY	22	57	19	45	27	13	21	29	23	21	15	36	5	1	16	51	14	25	15
PENNSYLVANIA	23	101	54	83	141	48	52	113	44	86	72	93	28	13	30	169	380	75	65
MIDDLE ATLANTIC		1013	186	300	364	145	181	640	662	234	207	327	75	50	120	555	474	191	219
OHIO	31	55	83	77	157	84	58	87	18	90	745	70	30	16	25	89	11	47	99
INDIANA	32	16	52	21	146	37	31	40	7	53	66	14	17	15	20	61	18	17	369
ILLINOIS	33	44	195	72	745	698	96	65	20	69	65	22	73	114	32	105	19	17	79
MICHIGAN	34	28	65	21	107	46	41	22	10	712	50	19	24	15	16	32	10	16	66
WISCONSIN	35	14	549	27	63	18	24	14	7	24	13	6	42	19	11	32	4	4	17
EAST N CENTRAL		157	944	218	1218	883	250	228	62	948	939	131	186	179	104	319	62	101	630
MINNESOTA	41	12	72	29	57	23	35	25	4	22	17	6	391	41	11	27	3	13	29
IOWA	42	46	50	17	76	39	25	22	5	19	17	12	31	270	7	18	1	7	24
MISSOURI	43	10	47	23	79.	33	26	13	4	32	19	15	12	42	9	23	5	14	29
NORTH DAKOTA	44	2	13	2	5	1	5	2		5	3	4	14	15	1	6	1	3	8
SOUTH DAKOTA	45	1	14	5	15	8	3	4	1	4	15	2	14	12	4	5		1	8
NEBRASKA	46	10	21	6	32	15	9	6	1	13	4	9	12	27	10	11	1	3	13
KANSAS	47	12	56	16	56	28	31	9	2	21	22	15	9	21	14	15	3	12	13
WEST N CENTRAL		93	273	98	320	147	134	81	17	116	97	63	483	428	56	105	14	53	124
DELAWARE	51	2	3		6			1			4	2	3			6	6	2	2
MARYLAND	52	13	8	15	18	8	13	8	10	10	8	15	4	1	10	18	9	345	8
D.C.	53	2	8	8	15	9	1	6	2	3	6	6	3		4	6	6	14	4
VIRGINIA	54	15	13	11	23	21	6	35	6	9	19	13	6	3	2	25	9	50	15
WEST VIRGINIA	55	6	10	3	15	4	2	16	6	4	23	8		2	1	15	4	11	17
NORTH CAROLINA	56	12	18	14	15	9	7	18	4	10	13	11	5	2	4	20	5	18	2
SOUTH CAROLINA	57	4	4	5	14	6	4	16	3	7	11	7	1	2		9	3	8	14
GEORGIA	58	18	19	12	13	5	8	6	3	10	14	13	2	2	2	27	2	24	8
FLORIDA	59	3	16	5	4	4	2	6	1	4	9	7	1	3	3	2		4	7
SOUTH ATLANTIC		75	99	73	123	66	43	112	35	57	107	82	25	15	26	128	44	476	77
KENTUCKY	61	11	13	7	34	12	5	10	2	19	25	12	5	5		15	1	7	22
TENNESSEE	62	9	11	6	19	8	6	3	3	11	17	7	1	5	1	13	2	10	15
ALABAMA	63	14	9	2	15	7	7	3	1	10	20	3	4	3	4	8	2	12	6
MISSISSIPPI	64	1	4	1	15	6	2	2	2	3	5		2	7	2	6	2	10	4
EAST S CENTRAL		35	37	16	81	33	20	18	8	43	67	22	12	20	7	42	7	39	47
ARKANSAS	71	3		4	13	8	4	4	2	3	10	4	5	4		6	1	4	10
LOUISIANA	72	4	14	6	16	14	9	5	1	10	10	1	1	9	3	18	2	2	5
OKLAHOMA	73	4	14	3	23	21	11	4	4	14	7	7	8	9	10	8		2	16
TEXAS	74	16	27	38	53	22	39	18	4	35	19	25	9	17	21	63	3	13	24
WEST S CENTRAL		27	55	51	105	65	63	31	11	62	46	37	23	39	34	95	6	21	55
MONTANA	81	7	11	5	21	9	13	10	1	13	3	3	13	2	8	12	1	2	4
IDAHO	82	5	4		8	3	8			4	5	2	4		3	1		2	8
WYOMING	83	7	7		2	4	2			1		6	1	1	1	1		1	1
COLORADO	84	9	19	17	38	15	30	17	4	19	13	15	10	10	20	20		6	10
NEW MEXICO	85	2	4	1	4	1	8	1	1	5		2	4		1	5		1	3
ARIZONA	86	2	4	1	5	4	6	6		2	2	3	5	4	9	3		2	8
UTAH	87	13	29	12	16	9	45	16	1	9	2	9	7	6	18	21	2	4	26
NEVADA	88	1		1	5		3	3			1	1	1		2	1			1
MOUNTAIN		46	78	37	99	45	115	53	7	53	26	41	45	23	62	64	3	18	61
WASHINGTON	91	12	19	13	23	17	46	12	3	11	13	10	18	5	40	42	2	8	12
OREGON	92	16	28	8	30	10	32	11	12	8	6	9	8	9	29	14	1	5	12
CALIFORNIA	93	46	43	85	52	44	914	36	8	40	28	36	34	9	419	125	7	27	25
ALASKA	94						1			1		1			1		1		
HAWAII	95		3	3	3	1	1			1			1	1		2		2	3
VIRGIN ISLANDS	96																		
PANAMA CANAL Z.	97																		
PUERTO RICO	98	1				5	2	2	1	5							2		
PACIFIC		75	93	109	108	77	996	61	24	66	47	56	61	24	489	183	13	42	52
UNKNOWN		44	2			10		26	1	1	3		2		1			33	
TOTAL U. S.		1818	1861	1577	2602	1582	1932	1381	899	1689	1599	1302	959	790	974	2640	669	1066	1344

Appendix 8

STATES AND REGIONS OF BACCALAUREATE ORIGIN FOR FORTY LEADING DOCTORATE INSTITUTIONS: PHYSICAL SCIENCES

Northwestern University	Iowa State University of Science and Technology	Indiana University	Princeton University	University of Texas	Pennsylvania State Univ.	Catholic Univ. of America	University of Pittsburgh	Univ. of So. California	Univ. of North Carolina	Univ. of Calif. (Los Angeles)	University of Washington	Michigan State Univ. of Agri. and Applied Science	University of Missouri	Calif. Inst. of Technology	Fordham University	Boston University	Duke University	University of Maryland	Rutgers University	Syracuse University	University of Nebraska	TOTAL
1	3	4	6	1	6		1	1	1		1	1	1	1	1	3	1	1	3	2		185
4	11	3	16	1	9		2	1	2	1	2			4		1	3		5	1	1	297
1	5		10		7		2			2							2	1		4		121
17	20	14	93	7	40	20	25	5	8	23	13	12	4	79	8	72	20	12	12	13	1	3059
3	4	1	14	1	7	4	1	1	1	4	6	2		2		4	8	5	2	3		255
13	11	3	34	2	8	6	5	1	4	6	3	2	2	20	1	2	1	3	5	2		808
39	54	25	173	12	77	30	36	9	16	36	25	17	7	106	10	82	35	22	27	25	2	4725
42	49	36	147	16	119	35	45	14	29	24	14	8	11	71	107	2	53	63	64	133	3	4948
6	5	3	185	2	13	6	6	3	5	5		3		24	4		4	7	85	1	1	801
39	28	16	118	8	309	36	244	6	16	15	5	16	4	46	11	4	12	37	46	8	2	2673
87	82	55	450	26	441	77	295	23	50	44	19	27	15	141	122	6	69	107	195	142	6	8422
34	53	22	44	4	49	11	50	3	10	5	7	24	2	39	1	2	14	9	7	16	5	2252
37	26	171	16	6	30	2	11	3	4	1	11	11	8	15	3		3	9	3	3	1	1374
212	57	31	37	12	43	13	15	9	8	28	20	24	24	47	1	4	11	13	1	4	18	3162
33	36	21	18	3	22	6	13	2	2	6	6	117	6	13			10	11	3	7	2	1637
24	16	5	7	2	8	1	8	1		3	1	2	3	13			2	7	3	2	1	997
340	188	250	122	27	152	33	97	18	24	43	45	178	43	127	5	6	40	49	17	32	27	9422
21	37	7	10	8	13	3	2	1	4	8	8	6	8	26			3	15		3	28	1028
22	251	5	6	2	14	2	8		8	9	7	10	6	18				4	2	3	5	1068
15	46	6	9	9	15	5	8	4	3	8	2	6	160	9	2		4	12	5	1	11	775
2	4	1	1		4		2			2	2	2			1			2			1	114
2	27	1	4		7		3			2	1	4	3	1				5	1		4	181
9	24	4	4	2	2	2	2	1	2	3	7	7	3	8		1	1	2			96	383
12	36	5	4	5	9	5	11	2	4		4	2	4	6			1	2			7	474
83	425	29	38	26	64	17	36	8	21	32	31	37	184	68	3	1	9	42	8	7	152	4023
1					2	2						1										43
3		3	15	1	18	7	3		2	3				8	5		3	106	3	1		702
	1	1	14		13	56	2		2	1				2	2	2	1	22				222
9	8	8	16	3	11	6	11	1	26	1		3	1	6			27	9	1	2		430
2	4			4	4		9		4			5		1			4	6	1	1		192
9	7	2	13	8	11	2	3	1	149		2	1	1	5			67	5	3	1		477
	4		4	2	3		4		63		1	2		1			14	2		2		220
6	6	2	13	8	12	1	4	1	21			3		12			11	1				289
10	3	2	3	1	8	2	5		4		2	1	2	3		1	7		1	1		137
40	33	18	78	27	82	76	41	3	271	5	5	16	4	38	7	3	134	151	9	8		2712
12	7	9	2	5	4	2	4		5	1	1	6	2	4	2		3	1		1		276
7	12	6	4	4			5	1	11		2	8	4	3			9		2	2		227
4	3		4	6	5	3	2		7	1	2	1	1	2	2		4	3	1	1	7	189
4	3	6		11	2	1	4		19				3				2					129
27	25	21	10	26	11	6	15	1	42	2	5	15	10	9	4		18	4	3	4	7	821
	7		2	10	1	2			3				7	1				3		1	1	123
5	6		9	34		2	5	1	3	1	1	2	2	5			2	1	2	2		213
6	12	2	3	22	5		2	1	4	4	2	6	2	13		1	2	1		1		254
16	29	2	17	462	8	5	11	1	8	7	2	2	3	35		1	10	4			2	1071
27	54	4	31	528	14	9	18	3	18	12	5	10	14	54		2	14	9	2	4	3	1661
2	15	3	5	1	6	1	3	1		4	4		3	10				2		1		199
3		1			2					2	10			4				2				81
			2					2			1					1						41
9	18	1	9	5	4	3	4	4	2	7	6	2	1	13			1	2	1		2	366
1	3	2			1			1	1	4	1			3						1	1	62
2	5			2	1		1	1		3		1		14				1			1	98
3	25	4	10	2	14					4	11	1		15			1	2	1	1		339
1	1	1							1	1	4							1		1		31
21	67	12	26	10	28	4	8	9	4	25	37	4	4	59		1	2	10	2	4	4	1217
5	7	4	17	8	4	4	7	1	2	9	250	4	1	34			3	3		2		671
13	11	4	5	2	8		3	1		4	50	2		24				1			1	377
17	23	6	65	15	13	5	10	62	3	337	64	7	4	450		1	8	9		1	4	3082
					1									1								7
1	1																	1				24
					1								1				2			1		23
36	42	14	87	25	27	9	20	64	5	350	364	13	6	509		1	13	14		4	5	4184
						2			1					2								128
700	970	428	1015	707	896	263	566	138	452	549	536	317	287	1113	151	102	334	408	263	230	206	37315

Appendix 8

STATES AND REGIONS OF BACCALAUREATE ORIGIN FOR FORTY LEADING DOCTORATE INSTITUTIONS: BIOLOGICAL SCIENCES

		Columbia University	Univ. of Wisconsin	Harvard University	University of Chicago	University of Illinois	Univ. of Calif. (Berkeley)	Cornell University	New York University	University of Michigan	Ohio State University	Yale University	University of Minnesota	State Univ. of Iowa	Stanford University	Massachusetts Inst. of Tech.	Univ. of Pennsylvania	Johns Hopkins University	Purdue University
MAINE	11	11	4	31	2	10	3	22	2	10	5	15	7	3	3	3	2	6	6
NEW HAMPSHIRE	12	3	14	15	3	7	9	31	2	12	16	12	8	4	1	2	5	5	2
VERMONT	13	6	5	6	1	3		8		5	2	10	2		1		1	6	
MASSACHUSETTS	14	71	60	201	36	31	31	121	9	30	16	79	31	15	4	56	27	35	27
RHODE ISLAND	15	3	17	8	5	4	2	20		4	6	17	6	4	1	2	5	6	6
CONNECTICUT	16	15	18	22	3	10	5	25	4	9	8	106	16	8	3	2	19	13	6
NEW ENGLAND		109	118	283	50	65	50	227	17	70	53	239	70	34	13	65	59	71	47
NEW YORK	21	294	114	52	70	64	71	484	219	81	37	104	61	36	10	7	47	65	40
NEW JERSEY	22	13	31	16	10	9	10	26	8	6	13	20	15	4	1	2	17	22	10
PENNSYLVANIA	23	42	77	44	26	38	27	124	16	47	29	56	49	8	4	6	230	58	28
MIDDLE ATLANTIC		349	222	112	106	111	108	634	243	134	79	180	125	48	15	15	294	145	78
OHIO	31	23	87	30	69	37	25	70	6	57	481	26	47	17	8	2	17	39	35
INDIANA	32	13	69	10	61	59	19	53	8	26	25	14	15	20	9	3	9	30	176
ILLINOIS	33	14	112	15	387	432	45	77	8	47	32	16	46	36	16	2	12	21	39
MICHIGAN	34	10	78	17	26	34	32	40	3	323	33	20	33	12	6	2	7	25	30
WISCONSIN	35	8	711	6	22	27	13	16	4	18	13	5	37	19	4	1	5	12	7
EAST N CENTRAL		68	1057	78	565	589	134	256	29	471	584	81	178	104	43	10	50	127	287
MINNESOTA	41	4	40	7	17	23	17	24	1	17	9	15	547	7	3		5	17	8
IOWA	42	9	60	3	26	35	21	38	3	19	11	15	54	170	1	1	1	11	10
MISSOURI	43	5	22	6	20	36	14	31	5	9	14	7	29	8	2	2	3	8	9
NORTH DAKOTA	44	2	17	1	6	3	1	10		2	4	1	23	1	1			4	1
SOUTH DAKOTA	45	1	31	1	6	6	3	7	2	4	7	1	23	6	1		1	2	3
NEBRASKA	46	1	33	5	17	18	14	23	2	10	7	9	40	8	2		7	9	14
KANSAS	47	3	52	6	34	27	25	38		21	23	4	44	20	5		8	17	16
WEST N CENTRAL		25	255	29	126	148	95	171	13	82	75	52	760	220	15	3	25	68	61
DELAWARE	51		2	1		1	1	3			1		3				1		2
MARYLAND	52	12	15	4	13	8	4	18	2	4	9	15	3	4		1	17	80	2
D.C.	53	4	10	6	5	5	2	3	1	6	4	1	6	3	3	2	6	14	1
VIRGINIA	54	6	20	13	11	6	4	19	2	8	6	8	6	2	2	1	7	10	3
WEST VIRGINIA	55	4	18	3	10	6	3	20		6	27	4	8	14	1		1	2	9
NORTH CAROLINA	56	2	15	8	3	12	8	40	1	5	10	5	10	2			7	12	5
SOUTH CAROLINA	57	3	12	1	3	3	3	17	2	7	8	5	8		1		1	3	3
GEORGIA	58	6	17	4	13	11	9	18		12	11	3	9	8	2	1		11	3
FLORIDA	59	2	10	3	4	7	4	22	1	7	11	2	8	4	1			3	6
SOUTH ATLANTIC		39	119	43	62	59	38	160	9	55	87	43	61	37	10	5	40	135	34
KENTUCKY	61	2	31	5	7	20	2	21	4	14	26	4	9	3			3	2	13
TENNESSEE	62		24	2	6	11	2	14	1	5	9	4	10	4	1	1	2	8	9
ALABAMA	63	3	20	2	7	6	3	8	4	4	16	1	5	4		1	5	6	12
MISSISSIPPI	64	3	28	4	3	9	5	12		1	5	2	5	1			1	8	8
EAST S CENTRAL		8	103	13	23	46	12	55	9	24	56	11	29	12	1	2	11	24	42
ARKANSAS	71	2	15	2	3	9	3	17		4	4	3	1	2	1			4	6
LOUISIANA	72	1	16		2	9	4	23	1	7	13	7	15	5	2		3	1	7
OKLAHOMA	73	3	37	2	2	14	10	26		10	14	2	10	5			1	6	12
TEXAS	74	4	32	7	20	25	16	22	3	15	22	7	22	10	2		1	20	16
WEST S CENTRAL		10	100	11	27	57	33	88	4	36	53	19	48	22	5		5	31	41
MONTANA	81	1	21	2	8	4	8	5	2	9	2	2	23	3			2	4	8
IDAHO	82	1	20	3	5	5	4	16		6	5	10	10	5	1		1	3	5
WYOMING	83	1	8	2	3	2	2	1	1	3			6	5					1
COLORADO	84	3	24	7	23	16	14	41		17	5	5	29	7	5	1	3	11	12
NEW MEXICO	85			2	4	3	3	5		2	2		3	3	2			1	3
ARIZONA	86	1	12		4	1	14	5		2	8	1			1		2	2	1
UTAH	87		79	1	17	16	42	59	1	15	26	4	33	3	13			3	9
NEVADA	88						4			2				1	2				
MOUNTAIN		7	164	17	64	47	91	132	4	56	48	22	104	27	24	1	8	24	39
WASHINGTON	91	3	34	9	12	9	22	26	1	9	7	10	25	3	15	1	4	6	7
OREGON	92	3	28	7	7	8	25	13		7	4	8	16	9	19		5	7	11
CALIFORNIA	93	15	48	29	22	16	758	72	4	33	9	21	30	3	165	2	10	19	12
ALASKA	94			1															
HAWAII	95		11	1		3	8	6					4					1	1
VIRGIN ISLANDS	96																		
PANAMA CANAL Z.	97																		
PUERTO RICO	98	1	3	2	5			6	1	5	5		7				2		2
PACIFIC		22	124	49	46	36	813	123	6	54	25	39	82	15	199	3	21	33	33
UNKNOWN		24			3	1	1	38	1	1	1	1	1		4		4	62	
TOTAL U. S.		661	2262	635	1072	1159	1375	1884	335	983	1061	687	1458	519	329	104	517	720	662

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STATES AND REGIONS OF BACCALAUREATE ORIGIN FOR FORTY LEADING DOCTORATE INSTITUTIONS: BIOLOGICAL SCIENCES

Northwestern University	Iowa State University of Science and Technology	Indiana University	Princeton University	University of Texas	Pennsylvania State Univ.	Catholic Univ. of America	University of Pittsburgh	Univ. of So. California	Univ. of North Carolina	Univ. of Calif. (Los Angeles)	University of Washington	Michigan State Univ. of Agri. and Applied Science	University of Missouri	Calif. Inst. of Technology	Fordham University	Boston University	Duke University	University of Maryland	Rutgers University	Syracuse University	University of Nebraska	TOTAL
	3	1			8		1	1	1			3	2	1		2	4	4	9	2	1	188
3	4	2	2	1	5	1			2	1		4	2		1	1	3	5	9	4		201
	1		1	1	4				1			2	3		1	1	1	3	3			78
9	15	5	5	3	10	6	5	4	6	8	6	12	8	6	9	51	8	12	25	3	1	1097
3	6	2	1	1				1	4			3			1	8	4	5	16	1		172
1	5	4	6		4		2		7	1	1	2		4	3	2	7	9	8	2		360
16	34	14	15	6	31	7	8	6	21	10	7	26	15	11	15	65	27	38	70	12	2	2096
14	26	29	24	13	15	13	15	14	14	18	11	25	9	13	84	10	36	34	95	70	2	2440
2	7	4	14		9	4	1	1	4	3	1	6	3	2	13	1	3	12	136	1		460
9	22	6	14	5	137	7	154		5	4		25	9	7	7	3	22	44	51	10	2	1452
25	55	39	52	18	161	24	170	15	23	25	12	56	21	22	104	14	61	90	282	81	4	4352
20	33	15	4	10	8	3	9	6	6	4	3	24	9	2	2		6	17	11	1	4	1273
8	26	71	3	7	4	9	5	3	3	2	2	22	5	3	1		6	5	10	3	3	820
117	47	16	2	4	9	3	2	11	4	8	6	25	9			1	5	7	13	1	3	1650
8	30	7	1	6	5	4	1	4	2	9	5	188	3	3	1	1	11	9	16	7	3	1055
7	16				2	2	1	2	3	6	2	12	4	3	2		6	6	10	1	2	1015
160	152	109	10	27	28	21	18	26	18	29	18	271	30	11	6	2	34	44	60	13	15	5813
4	34	2		2	7		1	2	2	3	6	11	4	1	1		4	9	6	3	6	869
3	230	7	4	2	5	4	1		8	4	2	17	5	3			5	9	6	1	4	808
14	28	2	1		4	2	1	2	3	3	3	2	157	2	2			7	3	2	5	473
	10	1			1			2		1	2	4					1	3	1		1	104
8	27				3		1				1	1	2					2	1		2	153
5	47	1		2	2			3	10	4	4	4	7	3	1	2	1	3	8		84	410
5	47	4	2	5	8	3	3	4	3	1	2	11	9		1		3	4	5		18	481
39	423	17	7	11	30	9	7	13	26	16	20	50	184	9	5	2	14	37	30	6	120	3298
	1				3				4		1							7	3	1		35
2	8	3	2		7	5	1		5	1	1	8	2	3	1		8	133	6	1	1	409
	2				3	25	4		3	2					3		2	18	5			149
3	13	4	1	2	7	2	3	1	19	1		12	1				11	9	9	1		233
1	8		2		7		9	2	5	1	1	7	5				3	7	5	2		201
2	17	1	3	2	4	1	4		71	1		2	3	1		1	43	9	5	3	2	320
	13	1	4	2	5	1			22	1		5	1		1	1	6	5	13		2	163
	5		1	4			1		16	1		4					12	4	3	1	1	191
2	8	1		4	3	1	2	2	7			3	2	1			6	6	7		1	151
10	75	10	13	14	39	35	24	5	152	8	3	41	14	5	5	2	91	198	56	9	7	1852
1	17	5		2	3	1	1	1	15			10	9			1	3	6	5		1	247
1	11	1	2	2	2		1	1	8			7	3	1			9	3	2		1	168
2	15		2	4	1	3	2		8	1		7	1			1	3	6	3	1		167
	12	1			4				5			5	3	1			4	5			1	136
4	55	7	4	8	10	4	4	2	36	1		29	16	2		2	19	20	10	1	3	718
	8			1					6		1	6	5				2	3	1		1	110
3	14			6	1	2	1		3			8	5	1	1	1	1	2	1		2	168
1	38	2	3	7	2			2	2	3	2	8	9				1	6			11	251
1	42	2	4	177	4	5	3	3	3	2	1	17	3	3			2	6	6		5	533
5	102	4	7	191	7	7	4	5	14	5	4	39	22	4	1	1	6	17	8		19	1062
3	14				3	1	2	1	1	2	8	2	2		1		2	3	1		2	152
	9				6			2	3	1	9	4	1			1	4	1	1	1	1	144
1									1		3	1							1		4	46
2	29	3		1	2		2	2	3	3	3	6	3	1		1	4	5	8	2	9	312
1	10	1		1	1				1			2	3						2		1	56
3	5	1		2	2			1	1	3	1	2		1			1		1			78
1	60	1		1	4		1	3	15	7	4	11	5	7			2	5	28		9	485
																			1			10
11	127	6		5	18	1	5	9	25	16	28	28	14	9	1	2	13	14	43	3	26	1283
8	8	1	1	4	3	2	2	5	2	8	130	6	1	2	1		4	6	5	2	1	405
	28	2		4	1		4	2	1	5	14	7	1	2		1	1	4	2	1	4	261
6	14	2	4	8	3	1		84	1	170	14	9	5	47		1	8	10	4	1	4	1664
										1												2
1	3										1	2		2						1		45
					5				3	1		2			1			1	3		1	56
15	53	5	5	16	12	3	6	91	7	185	159	26	7	53	2	2	13	21	14	5	10	2433
						2						3			1	1		1	1	1		152
285	1076	211	113	296	336	113	246	172	322	295	251	569	323	126	140	93	278	480	574	131	206	23059

Appendix 8

STATES AND REGIONS OF BACCALAUREATE ORIGIN FOR FORTY LEADING DOCTORATE INSTITUTIONS: SOCIAL SCIENCES

		Columbia University	Univ. of Wisconsin	Harvard University	University of Chicago	University of Illinois	Univ. of Calif. (Berkeley)	Cornell University	New York University	University of Michigan	Ohio State University	Yale University	University of Minnesota	State Univ. of Iowa	Stanford University	Massachusetts Inst. of Tech.	Univ. of Pennsylvania	Johns Hopkins University	Purdue University
MAINE	11	20	11	30	5	3	2	9	7	2	2	10	3	3	2		2	5	
NEW HAMPSHIRE	12	40	8	56	2	18	6	8	3	7	5	14	5	3	4	3	4	2	2
VERMONT	13	10	1	10	2	3	4	13	1	4		1	2		1	1	4		2
MASSACHUSETTS	14	195	31	633	18	108	47	31	31	48	14	84	29	23	17	17	44	25	19
RHODE ISLAND	15	11	5	26	4	10	1	4	5	2	3	8	5	3	1		5	5	1
CONNECTICUT	16	78	11	69	3	21	15	17	11	25	10	225	17	8	11	1	16	12	7
NEW ENGLAND		354	67	824	34	163	75	82	58	88	34	342	61	40	36	22	75	49	31
NEW YORK	21	936	90	205	42	127	68	225	672	94	55	115	47	54	26	14	104	50	44
NEW JERSEY	22	61	19	63	2	13	10	14	26	10	13	35	6	3	6	5	26	14	5
PENNSYLVANIA	23	133	38	109	16	66	25	45	36	35	45	49	19	26	8	11	444	37	16
MIDDLE ATLANTIC		1130	147	377	60	206	103	284	734	139	113	199	72	83	40	30	574	101	65
OHIO	31	108	106	105	38	135	26	47	28	69	520	56	36	60	20	5	39	28	26
INDIANA	32	37	55	32	38	76	5	13	8	26	34	17	15	22	10	1	14	6	101
ILLINOIS	33	73	86	89	382	696	42	37	24	36	32	40	53	70	22	6	37	16	37
MICHIGAN	34	39	39	46	17	48	33	9	7	430	30	13	18	26	12	2	10	6	20
WISCONSIN	35	36	371	48	22	58	18	16	6	21	16	14	46	20	7		9	8	15
EAST N CENTRAL		293	657	320	497	1013	124	122	73	582	632	140	168	198	71	14	109	64	199
MINNESOTA	41	20	46	39	11	35	16	11	8	12	6	14	418	31	13	4	4	7	11
IOWA	42	46	44	33	26	45	19	15	4	11	16	5	37	377	10	1	6	5	23
MISSOURI	43	22	38	36	26	49	16	19	8	19	12	18	23	40	12	2	14	4	11
NORTH DAKOTA	44	1	9	3	3	4	1	1	1	4	1		13	5	1		1		1
SOUTH DAKOTA	45		11	8	2	8	6	2	2	4	3	2	16	13	1		1	2	4
NEBRASKA	46	16	35	10	8	22	16	21	1	4	9	12	29	23	9	2	5	2	8
KANSAS	47	9	33	33	26	56	13	11	4	10	22	6	28	52	9	3	13	3	18
WEST N CENTRAL		114	216	162	102	219	87	80	28	64	69	57	564	541	55	12	44	23	76
DELAWARE	51	1		1	1	1		1	1	3	1	1	2				2		
MARYLAND	52	20	12	19	4	7	2	6	3	8	15	10	3	1		1	5	94	
D.C.	53	29	8	17	2	23	9	6	12	5	6	7	9	3	6	1	12	8	2
VIRGINIA	54	42	9	27	6	27	7	18	8	10	11	8	11	7	4	1	17	32	1
WEST VIRGINIA	55	2	5	2	6	5	1	9	6	6	18		4	4	1		6	8	3
NORTH CAROLINA	56	23	9	35	8	19	5	19	11	8	14	11	2	7	1	1	8	8	5
SOUTH CAROLINA	57	9	5	7	1	13	1	3	2		6		3	1			3	5	4
GEORGIA	58	21	11	10	4	16	6	5	9		14	4	3	3	3	2	7	10	4
FLORIDA	59	3	7	11	10	12	3	17	6	7	9	2	6	3	1	1	4	2	7
SOUTH ATLANTIC		150	66	129	42	123	34	84	58	47	94	43	43	29	16	7	64	167	26
KENTUCKY	61	4	15	14	13	25	5	7	4	4	10	7	7	3	2		4	1	8
TENNESSEE	62	19	13	17	10	23	2	4	2	3	16	9	5	6	5	1	6	8	1
ALABAMA	63	7	2	7	4	17	2	3	7	3	5		4	2	1		13	3	7
MISSISSIPPI	64	4	2	6	6	5	2	5			3	4	1	3	1		2		1
EAST S CENTRAL		34	32	44	33	70	11	19	13	10	34	20	17	14	9	1	25	12	17
ARKANSAS	71	5	10	4	10	8	7	2		2		1	3	4	1		2		2
LOUISIANA	72	7	4	8	8	9	8	7		4	6		4	9	1		6	2	4
OKLAHOMA	73	5	25	9	10	14	10	3	4	5	13	1	11	10	2		4	1	4
TEXAS	74	42	34	46	11	51	27	11	9	12	15	12	17	8	10	3	18	7	9
WEST S CENTRAL		59	73	67	39	82	52	23	13	23	34	14	35	31	14	3	30	10	19
MONTANA	81	3	2	2	3	3	8		1	1	4	1	3	1			3		1
IDAHO	82	2	1	2	4	1	7	1	1	1	1		3	3	3	1	1		1
WYOMING	83	2	1	1		3	3	5	1		3		1	1	1				
COLORADO	84	22	6	27	13	22	11	6	4	6	6	10	14	13	11		5	9	8
NEW MEXICO	85	6	1	11	2	7	3	2	2	4	2	1		2	4			1	
ARIZONA	86	5	2	8	4	9	12	3	2		1	3	2	1	4			1	3
UTAH	87	6	21	19	8	23	37	44	4	6	13	2	13	4	15	1	4	3	12
NEVADA	88			1		1	5	1		1		2	1		1		1		1
MOUNTAIN		46	34	71	34	69	86	62	15	19	30	19	37	25	39	2	14	14	26
WASHINGTON	91	23	36	32	3	33	45	12	1	12	14	20	18	8	23		8	7	6
OREGON	92	23	17	28	5	21	28	9	2	11	7	5	13	10	39		2	3	4
CALIFORNIA	93	86	28	130	19	74	666	23	10	28	24	47	29	27	263	6	23	20	12
ALASKA	94			1													1		
HAWAII	95	4	1	2		2	1		2	1	1	4	2					1	1
VIRGIN ISLANDS	96																		
PANAMA CANAL Z.	97																		
PUERTO RICO	98	3	3	4		2		4	1		1						2		5
PACIFIC		139	85	197	27	132	740	48	16	52	47	76	62	45	325	6	36	31	28
UNKNOWN		83	19	13		13	1	37	2	1	1			1	2		3	13	
TOTAL U. S.		2402	1396	2204	868	2090	1313	841	1010	1025	1088	910	1059	1007	607	97	974	484	487

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STATES AND REGIONS OF BACCALAUREATE ORIGIN FOR FORTY LEADING DOCTORATE INSTITUTIONS: SOCIAL SCIENCES

Northwestern University	Iowa State University of Science and Technology	Indiana University	Princeton University	University of Texas	Pennsylvania State Univ.	Catholic Univ. of America	University of Pittsburgh	Univ. of So. California	Univ. of North Carolina	Univ. of Calif. (Los Angeles)	University of Washington	Michigan State Univ. of Agri. and Applied Science	University of Missouri	Calif. Inst. of Technology	Fordham University	Boston University	Duke University	University of Maryland	Rutgers University	Syracuse University	University of Nebraska	TOTAL
		4	4		2	2	1			1						7		1		5		143
1	2		7	2	5	2		1	7		1	1	2			10	1			5	1	238
2		1	2		1	2			1			2			2	2				5		79
15	1	9	39	11	5	27	8	12	14	9	5	8			22	96	18	6	1	13	2	1735
3		2	6		1	4			4		1				2	7		2				131
8	4	3	16	6	2	3	4	1	5	3	5	4			4	6	5		1	5	1	643
29	7	19	74	19	16	40	13	14	31	13	12	15	2		30	128	24	9	2	33	4	2969
37	5	45	67	27	42	42	40	19	30	22	6	33	3		206	23	32	19	10	151	12	3839
5		8	82	2	4	5	7	2	3	3	1	3	1		27	2	4	2	16	7		515
15	2	12	37	8	146	31	233	11	18	6	8	8			22	9	29	17	2	16	4	1792
57	7	65	186	37	192	78	280	32	51	31	15	44	4		255	34	65	38	28	174	16	6146
28	7	37	34	13	10	17	30	20	18	11	8	17	3		13	6	12	6	1	25	4	1772
16	1	143	5	8	5	18	7	7	7	3	4	10	2		4	4	8	1		5	11	779
183	8	21	16	13	7	32	15	25	19	17	11	17	12		9	3	4	4	2	11	10	2217
20	6	5	5	9	2	14	5	10	5	2	6	58	1		8	4	7	2		10	5	989
28	5	9	9	2		12	3	5	5	5	6	6			1		4	2		4	4	841
275	27	215	69	45	24	93	60	67	54	38	35	108	18		35	17	35	15	3	55	34	6598
13	3	4	6	5	4	24	3	7	5	6	6	7	2			1			1	1	6	810
14	33	9	2	3	1	14	4	9	7	4	9	4	1		2	1	4	1		4	20	869
18	5	9	9	17	2	13	5	7	5	1	4	9	74		9	2	8	2		5	10	583
1	7						2	2		1	1	2	5								2	72
2	1			2		1		1		1		2	1			1		1				98
8	4	2	3	2		8	4	8		1	6	4	3		1	1	1	2		2	111	403
12	10	6	1	6	2	7	1	9	5	1	1	6	13		2		5	4		3	13	456
68	63	30	21	35	9	67	19	43	22	15	27	34	99		14	6	18	10	1	15	162	3291
					1				2													18
2		4	2	2		23	2	4	4	1	2	1			9	2	4	17		2		291
4		4	5	4	2	107	6	3	2	2	1				12		3	8				328
3	2	3	11	3	2	3	4		24	1		1	1			1	20	4		2	4	335
1		3	4	1	3		6	1	5	1		1	1			1	6	1		3	1	125
8	2	4	11	4	5	1	3	5	121	3		2	1		1	2	61	6		1		435
		4	2	1	2			4	21	2		1			1		15	1				117
2	3	5	4	3	1	2			25	1	1		1			4	17			2	1	204
5	1	4	1	6	4		3	2	18		3	1				1	7			3	1	171
25	8	31	40	24	20	136	24	19	222	11	7	7	4		23	11	133	37		13	7	2024
2	5	13	2	2	1	5	3	3	11	2	1	4			2	1	7		1	2	4	204
7		10	9	6	2	2	3	1	22	2	2	4	2			2	13	2				239
2		4	3	7	3		2	2	26	1	1	2	1			2	10			1		154
2	2	9	1	5	1		1		13		1		1				16	1		1	1	100
13	7	36	15	20	7	7	9	6	72	5	5	10	4		2	5	46	3	1	4	5	697
2	1	2		8		2		1	11		1		1			1	4	3			1	99
5	4	2	1	12	1	4			9	3			1		2		4					135
5	4	5	1	18	1			3	7	3	2	4	4				3	1		1	4	197
6		8	7	336	1	4	1	7	21	8	3	2	6		1	1	11	6		1	2	774
18	9	17	9	374	3	10	1	11	48	14	6	6	12		3	2	22	10		2	7	1205
1	4	4		3		2		3		2	2	1	1								1	60
	1				1				2		2	1	2									42
	2			1				3							1						1	30
5		4	6	2	1	3		8	3	1	9	5	5		1		2	1		7	6	262
		1		2			2	3		1			1							5		63
2			1	4				3		3		2	1				3			1		80
5	7	6	5	1	3		4	11	1	6	9	8					3	1		5	1	311
				1													1					17
13	14	15	12	14	5	5	6	31	6	13	22	17	10		2		9	2		18	9	865
6	1	1	11	2	1	6	2	11	4	5	132	1	1		3	1				3	5	497
8	3	2	6		1	5	1	7	2	3	17	2				3	2			4		293
18	3	13	28	9	7	12	6	261	6	301	38	8	3		3	5	7	6		11	8	2268
																						2
1									1		1											25
				1			2					1			1							30
33	7	16	45	12	9	23	11	279	13	309	188	12	4		7	9	9	6		18	13	3115
			1			5						3			2	1	1			1	4	207
531	149	444	472	580	285	464	423	502	519	449	317	256	157	0	373	213	362	130	35	333	261	27117

Appendix 8

STATES AND REGIONS OF BACCALAUREATE ORIGIN FOR FORTY LEADING DOCTORATE INSTITUTIONS: ARTS AND PROFESSIONS

		Columbia University	Univ. of Wisconsin	Harvard University	University of Chicago	University of Illinois	Univ. of Calif. (Berkeley)	Cornell University	New York University	University of Michigan	Ohio State University	Yale University	University of Minnesota	State Univ. of Iowa	Stanford University	Massachusetts Inst. of Tech.	Univ. of Pennsylvania	Johns Hopkins University	Purdue University
MAINE	11	12	4	56	7	8	1	7	5	3	5	24	1	3	1	1	4	1	
NEW HAMPSHIRE	12	28	6	30	12	4		7	7	11	3	16	1	4	2		2	3	
VERMONT	13	12	2	7	1	2	1	3	2	1	4	7		2	1	1	2		1
MASSACHUSETTS	14	147	56	623	63	23	10	26	61	32	11	135	11	20	16	2	32	21	
RHODE ISLAND	15	7	3	32	2	4	1	4	6	6		6	1				2	1	
CONNECTICUT	16	50	11	64	19	7	9	14	12	7	4	311	2	7	5	1	12	9	
NEW ENGLAND		256	82	812	104	48	22	61	93	60	27	499	16	36	25	5	54	35	1
NEW YORK	21	734	84	143	60	34	26	219	453	45	43	150	23	38	26	1	50	39	7
NEW JERSEY	22	45	7	39	12	2	5	12	38	6	2	47	1	4	5	1	18	7	
PENNSYLVANIA	23	100	30	110	59	26	16	26	51	29	22	102	5	17	2	1	354	25	5
MIDDLE ATLANTIC		879	121	292	131	62	47	257	542	80	67	299	29	59	33	3	422	71	12
OHIO	31	62	57	85	110	36	12	43	24	57	252	95	13	44	10	2	21	27	5
INDIANA	32	21	33	33	58	40	4	14	5	31	24	38	11	23	8		5	7	12
ILLINOIS	33	65	47	72	384	243	9	27	28	43	15	68	25	76	25	2	15	12	9
MICHIGAN	34	32	31	44	40	9	8	9	8	296	30	29	15	24	10	1	8	4	6
WISCONSIN	35	25	263	30	19	7	4	9	8	16	10	17	11	28	7		2	2	2
EAST N CENTRAL		205	431	264	611	335	37	102	73	443	331	247	75	195	60	5	51	52	34
MINNESOTA	41	22	24	35	46	17	8	14	6	13	6	57	138	40	5	1	3	4	1
IOWA	42	39	29	34	49	9	5	6	7	17	3	30	11	269	16		7	4	3
MISSOURI	43	28	25	25	60	40	14	16	13	12	11	36	5	52	9		1	8	1
NORTH DAKOTA	44	2	5		3	4				1	1	2	2	2	1			1	
SOUTH DAKOTA	45		3	1	4			1	2	3	1	2	4	24	1			1	
NEBRASKA	46	10	14	7	18	13	5	6	2	6	6	9	3	17	8		6	2	
KANSAS	47	9	16	20	35	10	5	10	3	19	13	23	5	22	10		4	4	
WEST N CENTRAL		110	116	122	215	93	37	53	33	71	41	159	168	426	50	1	21	24	5
DELAWARE	51	3		1		1				1							3	1	
MARYLAND	52	12	1	16	7	1	2	7	4	4		9	1	7	1		15	83	1
D.C.	53	14	3	15	6	6		4	9	5	5	13	1	1	1		14	23	
VIRGINIA	54	26	7	34	27	13		8	8	6	8	26	2	4	1		10	19	
WEST VIRGINIA	55	5	6	1	8	4		4	2	4	6	6		4			3		1
NORTH CAROLINA	56	30	9	23	19	7	2	20	7	14	4	31	3	7	2		7	7	
SOUTH CAROLINA	57	10	5	9	8	1	2	6	6	2	2	17	1	5			2	4	
GEORGIA	58	14	19	13	15	4	1	6	10	6	4	22	4	2	1		3	8	
FLORIDA	59	6	6	6	5	8	1	1	3	2	9	6	2	3	3		4	1	1
SOUTH ATLANTIC		120	56	118	95	45	8	56	49	44	38	130	14	33	9		61	146	3
KENTUCKY	61	15	5	8	14	12		3	2	14	6	10	4	16	1		9	5	
TENNESSEE	62	19	9	16	20	10	1	4	6	14	8	30		5	6		2	11	
ALABAMA	63	10	7	5	16	2	3	2	4	10	3	6		6				5	
MISSISSIPPI	64	4	5	4	5	5		2		1		9		1	1		1	3	1
EAST S CENTRAL		48	26	33	55	29	4	11	12	39	17	55	4	28	8		12	24	1
ARKANSAS	71	2	2	11	9	3		3	1	3	2	1	3	3	1		2	1	
LOUISIANA	72	7	4	12	11	4		1	6	4	2	17	2	5	2		1	2	1
OKLAHOMA	73	6	15	4	12	8	3	2		4	9	13	2	11	2		1	2	1
TEXAS	74	34	21	47	54	24	6	7	11	15	14	29	1	28	8		18	2	1
WEST S CENTRAL		49	42	74	86	39	9	13	18	26	27	60	8	47	13		22	7	3
MONTANA	81	3	5	3	1	1			2	4		2		3	2		2	1	1
IDAHO	82	1	1	1	1	2	2	1	1	3	2	4		3	3		1		
WYOMING	83	1						1		1		1	2	1					
COLORADO	84	8	13	8	17	14	9	4	4	4	10	16	2	13	12		4	1	
NEW MEXICO	85	1	3		2				1	1	1	2		5	2		2	1	
ARIZONA	86	4	3	3	1	2	2			3	2	1		4	2			1	
UTAH	87	7	13	12	17	3	7	5	14	3	12		9	18	31			2	1
NEVADA	88			1				1						1	3				
MOUNTAIN		25	38	28	39	22	20	12	22	19	27	26	13	48	55		9	6	2
WASHINGTON	91	19	12	21	21	9	11	7	7	10	3	20	6	14	13		3	3	3
OREGON	92	12	9	9	15		19	3	4	7	2	13	1	7	10			2	1
CALIFORNIA	93	68	18	83	50	10	283	25	3	20	16	66	8	16	143	3	4	13	2
ALASKA	94							1				1							
HAWAII	95	1		1				2	2		1				2		1		
VIRGIN ISLANDS	96																		
PANAMA CANAL Z.	97																		
PUERTO RICO	98	3			2	1	1		2	1	1						1		
PACIFIC		103	39	114	88	20	314	38	18	38	23	100	15	37	168	3	9	18	6
UNKNOWN		77	6	29	66	3	1	40	12	3		5		1	3		1	13	
TOTAL U. S.		1872	957	1886	1490	696	499	643	872	823	598	1580	342	910	424	17	662	396	67

Appendix 8

STATES AND REGIONS OF BACCALAUREATE ORIGIN FOR FORTY LEADING DOCTORATE INSTITUTIONS: ARTS AND PROFESSIONS

Northwestern University	Iowa State University of Science and Technology	Indiana University	Princeton University	University of Texas	Pennsylvania State Univ.	Catholic Univ. of America	University of Pittsburgh	Univ. of So. California	Univ. of North Carolina	Univ. of Calif. (Los Angeles)	University of Washington	Michigan State Univ. of Agri. and Applied Science	University of Missouri	Calif. Inst. of Technology	Fordham University	Boston University	Duke University	University of Maryland	Rutgers University	Syracuse University	University of Nebraska	TOTAL
3		2	3	1	1			1	5	2	1					12	3			1		178
5		3	9			3					1	1			4	12	1		1	1		177
		1			1	3			2						1	2	1					60
18		6	28	1	6	29	9	8	13	2	3	1	1		25	119	11	3	2	4	3	1581
1		2	5			9	2				1		1			3		1		1		101
5		6	24	2	1	5	5	4	1	2	1	2			6	14	5		1	2		630
32		20	69	4	9	49	16	13	21	6	7	4	2		36	162	21	4	4	9	3	2727
31		23	52	5	7	73	14	17	19	9	7	3	1		204	25	4	5	4	40	2	2719
4		3	166		3	14	1		1	1	3				16	2	3	2	1	1	1	473
22	1	11	42	5	40	47	131	11	11	4	4	3	1		13	26	6	1	1	5		1365
57	1	37	260	10	50	134	146	28	31	14	14	6	2		233	53	13	8	6	46	3	4557
31	2	27	36	10	3	33	21	13	17	3	8	6	1		9	43	12	1		6	2	1239
31	2	87	4	3	2	34	5	12	2	2	6	5	2		5	30	6	1	1	4		611
184	1	35	15	6	7	39	4	32	6	8	5	3	4		8	18	2	1		4	1	1548
31		10	9	1	5	15	3	9	4	2	1	20			5	8	3	1		4		735
25		10	2	2		23		1	4	2	1	1	1		3	3		1		1		540
302	5	169	66	22	17	144	33	67	33	17	21	35	8		30	102	23	5	1	19	3	4673
20	1	3	7	3	1	20	3	6		3	6	2	3		2	13	1		2		3	539
21		6	1	2	1	9	1	11	2	1	4	2	3		1	14	1			2	4	624
19		11	7	5	4	10	3	4	11	4	5		41		9	6	3			1	2	501
2									1		1	1				1						30
13	1		4			1			1		2		3			1						73
19	1	2	1	2	1	8		4		2	4		3		3	6	1	1		1	20	211
29		14	5	9		16		9	1		3	2	6		4	18	3		1	1	1	330
123	3	36	25	21	7	64	7	34	16	10	25	7	59		19	59	9	1	3	5	30	2308
1		1						2	1													15
2		1	6	1		38	2	2	7			1	1		14	1	4	5				256
4		3	2			562	2	1	5		1	1			16	2	1	6	2		2	730
5		2	11	4	3	1	1	3	24	1			1			8	12	2		2		279
3		9	2	1	1		7	1			1	1				4	2			1		87
3		3	9	3	2	3	1	5	121				2			3	51			1		399
1			6	4	2				38			1	1		1	2	17			1	1	155
8	1	4	6	9	2			1	17			1				18	13					212
6		2	2	2					12	3	2					1	9			1		107
33	1	25	44	24	10	604	13	15	225	4	4	5	5		31	39	109	13	2	6	3	2240
7		15	1	1	1	9	1	5	5		1		3		4	11	9					197
6	1	5	5	4	1		1	5	16	2	2					5	15				2	231
8		3		2		1	2		11	1			1		5	3	4					120
2		3		1			1	3	9	1						3	3					68
23	1	26	6	8	2	10	5	13	41	4	3		4		9	22	31				2	616
3		2	2	5	1	3		2	4				4			1	2					76
3		1		9	1	5		3	10		1	1				1	1	2				119
10		13	4	11	1			7	4	3	1					8	1	2				160
8		11	6	215		10	1	13	9	1	5	1	10			9	11			1	2	633
24		27	12	240	3	18	1	25	27	4	7	2	14			19	15	4		1	2	988
1		1		1			1				1	1								1		37
2		1						2	1		5									1		38
								1														8
16		6	3	3	1	3	1	6	4		4	3	4			1	1	1			1	197
			1	2				1	1	3	1		2									32
1		2				1	1	4	2	1	1					1	1					43
6	1	5			2	1		16		3	8		1		1	2		1				201
										1												7
26	1	15	4	6	3	5	3	30	8	8	20	4	7		1	4	2	2		2	1	563
14		1	4	2		6		13		6	110		1		5	5		1				350
1	1	5	2			2		12	1	1	18	1				6	2				1	167
17	2	8	19	7	2	11	1	187	2	60	18	1	2		1	25	3	1	1	1		1200
																						2
											2					1						13
		1													1							14
32	3	15	25	9	2	19	1	212	3	67	148	2	3		7	37	5	2	1	1	1	1746
1			2			25		1							9	5				2		303
653	15	370	513	344	103	1072	225	438	405	134	249	65	104	0	375	502	228	39	17	91	48	20721

Appendix 8

STATES AND REGIONS OF BACCALAUREATE ORIGIN FOR FORTY LEADING DOCTORATE INSTITUTIONS: EDUCATION

		Columbia University	Univ. of Wisconsin	Harvard University	University of Chicago	University of Illinois	Univ. of Calif. (Berkeley)	Cornell University	New York University	University of Michigan	Ohio State University	Yale University	University of Minnesota	State Univ. of Iowa	Stanford University	Massachusetts Inst. of Tech.	Univ. of Pennsylvania	Johns Hopkins University	Purdue University
MAINE	11	37	1	20		1		4	22	1	1	11		4	3		2		
NEW HAMPSHIRE	12	37		20	1	2	1	3	8		4	5			5		1		
VERMONT	13	26		6	3	1	1	8	6			2		1					
MASSACHUSETTS	14	202	7	138	12	8	1	6	110	3	8	33	3	8	11		10	1	2
RHODE ISLAND	15	26		9			1	1	3		1	3					1		
CONNECTICUT	16	87	2	12	2		3	3	19	5	5	52		1	2		1		
NEW ENGLAND		415	10	205	18	12	7	25	168	9	19	106	3	14	21		15	1	2
NEW YORK	21	1237	6	49	25	14	18	107	1072	17	31	36	3	12	38		21	6	
NEW JERSEY	22	143	2	7	1		2	5	95		2	4		2	3		8	1	
PENNSYLVANIA	23	289	3	21	14	10	11	18	156	9	15	13	3	8	10		183	10	
MIDDLE ATLANTIC		1669	11	77	40	24	31	130	1323	26	48	53	6	22	51		212	17	
OHIO	31	264	12	19	23	10	9	8	74	41	355	25	3	12	21		5	2	2
INDIANA	32	88	16	8	23	18	3	6	29	18	35	5	5	21	19		5		24
ILLINOIS	33	244	34	30	113	177	24	13	100	29	30	12	17	55	27		1	1	5
MICHIGAN	34	109	9	10	16	7	9	3	28	254	16	3	3	6	20		1	1	
WISCONSIN	35	88	268	5	15	13	8	5	27	13	10	4	35	25	18		1		1
EAST N CENTRAL		793	339	72	190	225	53	35	258	355	446	49	63	119	105		13	4	32
MINNESOTA	41	110	13	5	5	7	14	3	28	5	11	3	180	28	16			1	
IOWA	42	121	17	6	21	4	11	10	26	6	14	3	20	213	18		2		1
MISSOURI	43	135	5	7	23	19	6	2	36	5	8	22	10	26	25			2	
NORTH DAKOTA	44	18	3	2	4	1	1		3	1	2		3	6	7				
SOUTH DAKOTA	45	10	3		4	1	2	2	4		1	1	5	9	8				
NEBRASKA	46	75	4	2	4		6	5	14	4	6	3	8	15	12		1	1	1
KANSAS	47	103	9	7	15	11	15	5	25	3	18	6	7	19	21		2	1	1
WEST N CENTRAL		572	54	29	76	43	55	27	136	24	60	38	233	316	107		5	5	3
DELAWARE	51	5		1					1								2		
MARYLAND	52	57	2	2		2	3	2	11	3	2	1	1	2	2		3	47	1
D.C.	53	43		1	4		1	1	16	3	2		1		1		8	2	
VIRGINIA	54	76	1	7	7	4	1	11	26	9	16	8	1	3	1		8	1	
WEST VIRGINIA	55	29	3	1	2		2	4	11	3	18	2	6	3	4		1		
NORTH CAROLINA	56	65	3	7	4	2	1	6	27	6	7	12		3	6		4	1	
SOUTH CAROLINA	57	41	2	1	2				12	1	5	2		1	3				
GEORGIA	58	57	1	2	8	2	1	4	20	3	12	4	2	2			1		
FLORIDA	59	44		1	2	2		2	14	3	7	2		3	1			2	
SOUTH ATLANTIC		417	12	23	29	12	9	30	138	31	69	31	11	17	18		27	53	1
KENTUCKY	61	47	3	2	6	3		9	9	8	9	4	1	4	2		1	1	
TENNESSEE	62	66	6	5	9	4	4	8	33	13	10	4	1	6	3				1
ALABAMA	63	93	4	3	4	3	1	2	21	7	13	3		3	4		1	1	1
MISSISSIPPI	64	19			3	4		4	6	2	4	1			1				
EAST S CENTRAL		225	13	10	22	14	5	23	69	30	36	12	2	13	10		2	2	2
ARKANSAS	71	32	1	1	2	1	3	2	4		1	1		2	1				
LOUISIANA	72	25	4	5	2	4	2	4	6	1	2			5	4				
OKLAHOMA	73	44	5	1	3	4	5	3	12	1	4	8	3	1	24			1	
TEXAS	74	104	6	5	7	6	4	10	41	6	12	13	2	8	11		3		1
WEST S CENTRAL		205	16	12	14	15	14	19	63	8	19	22	5	16	40		3	1	1
MONTANA	81	9	1		2	1	4	1			2			3	7				
IDAHO	82	3			1	1	7		4	1	1	1	1	2	13				
WYOMING	83	6							2					2	4				1
COLORADO	84	77	2	2	5	3	9	1	19	5	6	7	2	16	41				
NEW MEXICO	85	5					10	1				1		2	2		2		
ARIZONA	86	19	1		1		4	1	1	1	2		1	1	12				
UTAH	87	35	3	6	6		44	6	6		7	2	2	1	37				
NEVADA	88	1					2								4				
MOUNTAIN		155	7	8	15	5	80	10	32	7	18	11	6	27	120		2		1
WASHINGTON	91	113	1	6	7	4	24	1	14	3	4	3	5	5	54				
OREGON	92	39	5	6	1	2	10	3	8	5	5	3	3	1	66				
CALIFORNIA	93	182	3	18	9	6	240	3	22	2	4	21	4	4	359			1	
ALASKA	94																		
HAWAII	95	4		2	1	1	1	1	3		4	1			2				
VIRGIN ISLANDS	96																		
PANAMA CANAL Z.	97																		
PUERTO RICO	98	22		1	1			3	6	2									
PACIFIC		360	9	33	19	13	275	11	53	12	17	28	12	10	481			1	
UNKNOWN		28	1	51	6			7	2		1	1			4			1	
TOTAL U. S.		4839	472	520	429	363	529	317	2242	502	733	351	341	554	957	0	279	85	42

Appendix 8

STATES AND REGIONS OF BACCALAUREATE ORIGIN FOR FORTY LEADING DOCTORATE INSTITUTIONS: EDUCATION

Northwestern University	Iowa State University of Science and Technology	Indiana University	Princeton University	University of Texas	Pennsylvania State Univ.	Catholic Univ. of America	University of Pittsburgh	Univ. of So. California	Univ. of North Carolina	Univ. of Calif. (Los Angeles)	University of Washington	Michigan State Univ. of Agri. and Applied Science	University of Missouri	Calif. Inst. of Technology	Fordham University	Boston University	Duke University	University of Maryland	Rutgers University	Syracuse University	University of Nebraska	TOTAL
				2	3	1		3					1		1	18			1	2		139
		1		1	1						1	1			3	15		1	4	2	1	118
		1			2							2				6	1		2	3		71
4	1	9		3	6	4	10	10	5	10	3	6	1		15	199		5	4	4		862
1		1			1	3	1								2	19			1	1		75
2	1	4		1	1		2	1		1		1				6		2		1		217
7	2	16		7	14	8	13	14	5	11	4	10	2		21	263	1	8	12	13	1	1482
4		16		8	41	29	17	19	2	9	3	7	4		141	16	1	11	19	125		3165
2		1			1	3	7	2	1				1		13	2	2	3	69	1	1	384
8	1	15		4	282	9	469	15	5	4		2	1		4	7	4	11	21	6		1641
14	1	32		12	324	41	493	36	8	13	3	9	6		158	25	7	25	109	132	1	5190
15	2	55		6	16	13	74	23	3	6	3	12	3		8	9	3	4	3	7	2	1152
15		336		4	9	6	5	15	2	2		12	3		4	4		1		4	2	747
131	1	79		10	11	9	12	24	1	16	7	23	29		5	5	1	13	2	3	8	1302
19		20			6	5	4	12		7	2	110	3		5	2		3	2	3	5	703
30	3	32		2	4	11	6	15	1	8	4	9	12		1	2	1	2	1	3	4	687
210	6	522		22	46	44	101	89	7	39	16	166	50		23	22	5	23	8	20	21	4591
4	4	18			6	8	2	14	4	9	7	8	6					6	1	2		528
9	19	26		5	6	5	5	15	1	1	4	11	11			3	1	1		2	14	632
9		21		5	9	8	3	23	2	3	2	8	290			2	1	2		1	12	732
2		2		1				3		1	8	1	2								2	73
2				1		1		2	1	2	2	4	3						1	1	2	72
4	3	9		2	2	4	1	10		6	4	3	10			2		2		3	195	421
10	2	14		3	4	3	5	18	1	4	2	2	26			3		1		1	10	377
40	28	90		17	27	29	16	85	9	26	29	37	348			10	2	12	2	10	235	2835
					1												1					11
1		3		2	9	11	2		3		1	2			2	3	2	29	1			212
		2			5	58	2	3				1	1		5	2		12				174
1	1	6		1	11		4	4	3	1	1	1	2			1	5	6				228
		8		2	12	1	45	1	1	1		3	1			2		1		1		168
		18		2	7		5	2	70	2		4	3			5	19	2				293
		9			4			1	9		2	2	1		1		3	2				104
1		6		4			1		3	1		2					2	4	1	2	1	147
2	1	9		4	2		1	2	2		1	2	1		1			1		1		113
5	2	61		15	51	70	60	13	91	5	5	17	9		9	13	32	57	2	4	1	1450
4	2	26		2	2	1	4	5	2	1		2	5		1		1	2		1		170
4		22		6	2		3	6	7		1	4	5			3	5	1	1	1		244
2		11		7	3	1	2		3	3		4			1	1	2		3			207
1		14		7				1				4	2				1	1				75
11	2	73		22	7	2	9	12	12	4	1	14	12		2	4	9	4	4	2		696
		4		8	3	1	1	2	1			2	6		1	1	2	1		1	2	87
2		3		4	2	1		2	3	1	2	2	4					2		1		93
1	2	7		2	5		2	3	1	3		1	12			1	1				4	164
9	2	17		300	9	2	4	14	1	3		3	14				1	3		2	1	624
12	4	31		314	19	4	7	21	6	7	2	8	36		1	2	4	6		4	7	968
1	1							4		1	7	1	1							1		47
	1	1						5			5	1	3									51
		2						1		1	1	1							1		1	23
2	1	8		2	5	3	1	15		7	3	2	3		2	2		3		3	3	260
		2		1	1	1		8		1							1				1	39
		1			3			18		2												68
	2	5		1	1			36	1	7		2	3			2						215
								2														9
3	5	19		4	10	4	1	89	1	19	16	7	10		2	4	1	3	1	4	5	712
3		2		2		3	1	8	1	4	81		2		2					1	4	358
		4						13		3	11	1				1		2		2		194
6		5		2	5	8		335		157	3	2	1		1	2	1	7		2	1	1416
					1																	21
				3	4																	42
9		11		7	10	11	1	356	1	164	95	3	3		3	3	1	9		5	5	2031
						7									2					1	2	116
311	50	855	0	420	508	220	701	715	140	288	171	271	476	0	221	346	62	147	138	195	278	20071

Appendix 8

STATES AND REGIONS OF BACCALAUREATE ORIGIN FOR FORTY LEADING DOCTORATE INSTITUTIONS: ALL FIELDS COMBINED

		Columbia University	Univ. of Wisconsin	Harvard University	University of Chicago	University of Illinois	Univ. of Calif. (Berkeley)	Cornell University	New York University	University of Michigan	Ohio State University	Yale University	University of Minnesota	State Univ. of Iowa	Stanford University	Massachusetts Inst. of Tech.	Univ. of Pennsylvania	Johns Hopkins University	Purdue University
MAINE	11	90	24	174	15	32	9	52	39	19	20	68	12	16	9	36	13	18	11
NEW HAMPSHIRE	12	136	39	155	40	38	21	67	30	41	38	63	21	13	15	38	15	15	9
VERMONT	13	71	12	34	10	15	6	41	12	13	10	25	6	3	5	16	11	8	7
MASSACHUSETTS	14	778	205	2121	297	181	177	247	249	191	72	449	100	72	92	1072	139	148	97
RHODE ISLAND	15	57	35	101	23	30	12	46	17	13	16	60	17	7	6	29	17	17	14
CONNECTICUT	16	255	56	214	61	45	59	73	61	59	37	1064	41	25	43	50	54	42	22
NEW ENGLAND		1387	371	2799	446	341	284	526	408	336	193	1729	197	136	170	1241	249	248	160
NEW YORK	21	4056	407	621	366	350	291	1533	3011	364	286	603	176	176	174	357	302	251	230
NEW JERSEY	22	319	78	170	49	40	48	86	190	43	45	142	27	14	31	59	83	69	30
PENNSYLVANIA	23	665	202	367	213	231	131	326	303	206	183	313	104	72	54	187	1591	205	114
MIDDLE ATLANTIC		5040	687	1158	628	621	470	1945	3504	613	514	1058	307	262	259	603	1976	525	374
OHIO	31	512	345	316	421	278	130	255	150	314	2353	272	129	149	84	98	93	143	167
INDIANA	32	175	225	104	255	301	62	126	57	154	184	88	63	101	66	65	51	60	682
ILLINOIS	33	440	474	278	2278	1979	216	219	180	224	174	158	214	351	122	115	84	67	169
MICHIGAN	34	218	222	138	176	174	123	83	56	2015	159	84	93	83	64	37	36	52	122
WISCONSIN	35	171	2162	116	132	132	67	60	52	92	62	46	171	111	47	33	21	26	42
EAST N CENTRAL		1516	3428	952	3262	2864	598	743	495	2799	2932	648	670	795	383	348	285	348	1182
MINNESOTA	41	168	195	115	126	115	90	77	47	69	49	95	1674	147	48	32	15	42	49
IOWA	42	261	200	93	180	150	81	91	45	72	61	65	153	1299	52	20	17	27	61
MISSOURI	43	200	137	97	185	200	76	81	66	77	64	98	79	168	57	27	23	36	50
NORTH DAKOTA	44	25	47	8	18	16	8	13	4	13	11	7	55	29	11	6	2	8	10
SOUTH DAKOTA	45	12	62	15	30	24	14	16	11	15	27	8	62	64	15	5	2	6	15
NEBRASKA	46	112	107	30	76	71	50	61	20	37	32	42	92	90	41	13	20	17	36
KANSAS	47	136	166	82	168	130	89	73	34	74	98	54	93	134	59	18	30	37	48
WEST N CENTRAL		914	914	440	783	706	408	412	227	357	342	369	2208	1931	283	121	109	173	269
DELAWARE	51	11	5	4	1	9	1	5	2	4	6	3	8			6	14	3	4
MARYLAND	52	114	38	56	35	33	24	41	30	29	34	50	12	15	13	20	49	649	12
D.C.	53	92	29	47	47	28	13	20	40	22	23	27	20	7	15	9	46	61	7
VIRGINIA	54	165	50	92	93	52	18	91	50	42	60	63	26	19	10	27	51	112	19
WEST VIRGINIA	55	46	42	10	29	31	8	53	25	23	92	20	18	27	7	15	15	21	30
NORTH CAROLINA	56	132	54	87	54	44	23	103	50	43	48	70	20	21	13	21	31	46	12
SOUTH CAROLINA	57	67	28	23	32	19	10	42	25	17	32	31	13	9	4	9	9	20	21
GEORGIA	58	116	67	41	57	34	25	39	42	31	55	46	20	17	8	30	13	53	15
FLORIDA	59	58	39	26	27	31	10	48	25	23	45	19	17	16	9	3	8	12	21
SOUTH ATLANTIC		801	352	386	375	281	132	442	289	234	395	329	154	131	79	140	236	977	141
KENTUCKY	61	79	67	36	64	82	12	50	21	59	76	37	26	31	5	15	18	16	43
TENNESSEE	62	113	63	46	66	54	15	33	45	46	60	54	17	26	16	15	12	37	26
ALABAMA	63	127	42	19	51	30	16	18	37	34	57	13	13	18	9	9	21	27	26
MISSISSIPPI	64	31	39	15	22	39	9	25	8	7	17	16	8	12	5	6	6	21	14
EAST S CENTRAL		350	211	116	203	205	52	126	111	146	210	120	64	87	35	45	57	101	109
ARKANSAS	71	44	28	22	30	36	17	28	7	12	17	10	12	15	4	6	5	9	18
LOUISIANA	72	44	42	31	38	41	23	40	14	26	33	25	22	33	12	18	12	7	17
OKLAHOMA	73	62	96	19	52	59	39	38	20	34	47	31	34	36	38	8	6	12	33
TEXAS	74	200	120	143	154	119	92	68	68	83	82	86	51	71	52	66	43	42	51
WEST S CENTRAL		350	286	215	274	255	171	174	109	155	179	152	119	155	106	98	66	70	119
MONTANA	81	23	40	12	23	30	33	16	6	27	11	8	39	12	17	12	8	7	14
IDAHO	82	12	26	6	11	20	28	18	6	15	14	17	18	13	23	2	3	5	14
WYOMING	83	17	16	3	10	4	7	7	4	5	3	7	10	10	6	1		1	3
COLORADO	84	119	64	61	82	84	73	69	31	51	40	53	57	59	89	21	12	27	30
NEW MEXICO	85	14	8	14	14	9	24	9	4	12	5	6	7	12	11	5	4	4	6
ARIZONA	86	31	22	12	19	12	38	15	3	8	15	8	8	10	28	3	2	6	12
UTAH	87	61	145	50	72	43	175	130	26	33	60	17	64	32	114	22	6	12	48
NEVADA	88	2		3	1	5	14	5		3	1	3	2	2	12	1	1		2
MOUNTAIN		279	321	161	232	207	392	269	80	154	149	119	205	150	300	67	36	62	129
WASHINGTON	91	170	102	81	90	48	148	58	26	45	41	63	72	35	145	43	17	24	28
OREGON	92	93	87	58	54	45	114	39	26	38	24	38	41	36	163	14	8	17	28
CALIFORNIA	93	397	140	345	199	103	2861	159	47	123	81	191	105	59	1349	136	44	80	51
ALASKA	94			2			1	1		1		2			1		2		
HAWAII	95	9	15	9	4	7	11	9	7	2	6	5	7	1	4	2	1	4	5
VIRGIN ISLANDS	96																		
PANAMA CANAL Z.	97																		
PUERTO RICO	98	30	6	7	15	1	3	15	11	13	7		7				7		7
PACIFIC		699	350	502	362	204	3138	281	117	222	159	299	232	131	1662	195	79	125	119
UNKNOWN		256	28	93	98	4	3	148	18	6	6	7	3	2	14		8	122	
TOTAL U. S.		11592	6948	6822	6663	5688	5648	5066	5358	5022	5079	4830	4159	3780	3291	2858	3101	2751	2602

Appendix 8

STATES AND REGIONS OF BACCALAUREATE ORIGIN FOR FORTY LEADING DOCTORATE INSTITUTIONS: ALL FIELDS COMBINED

Northwestern University	Iowa State University of Science and Technology	Indiana University	Princeton University	University of Texas	Pennsylvania State Univ.	Catholic Univ. of America	University of Pittsburgh	Univ. of So. California	Univ. of North Carolina	Univ. of Calif. (Los Angeles)	University of Washington	Michigan State Univ. of Agri. and Applied Science	University of Missouri	Calif. Inst. of Technology	Fordham University	Boston University	Duke University	University of Maryland	Rutgers University	Syracuse University	University of Nebraska	TOTAL
4	6	11	13	4	20	3	3	6	7	3	2	4	4	2	2	42	8	6	13	12	1	833
13	17	9	34	5	20	6	2	2	11	2	5	7	4	4	8	39	8	6	19	13	3	1031
3	6	3	13	1	15	5	2		4	2		6	3		4	11	5	4	5	12		409
63	37	43	165	25	67	86	57	39	46	52	30	39	14	85	79	537	57	38	44	37	7	8334
11	10	8	26	2	9	20	4	2	9	4	8	5	1	2	5	41	12	13	19	6		734
29	21	20	80	11	16	14	18	7	17	13	10	11	2	24	14	30	18	14	15	12	1	2658
123	97	94	331	48	147	134	86	56	94	76	55	72	28	117	112	700	108	81	115	92	12	13999
128	80	149	290	69	224	192	131	83	94	82	41	76	28	84	742	76	126	132	192	519	19	17111
19	12	19	447	4	30	32	22	8	14	12	5	12	5	26	73	7	16	26	307	11	3	2633
93	54	60	211	30	914	130	1231	43	55	33	17	54	15	53	57	49	73	110	121	45	8	8923
240	146	228	948	103	1168	354	1384	134	163	127	63	142	48	163	872	132	215	268	620	575	30	28667
128	97	156	118	43	86	77	184	65	54	29	29	83	18	41	33	60	47	37	22	55	17	7688
107	55	808	28	28	50	69	33	40	18	10	23	60	20	18	17	38	23	17	14	19	17	4331
827	114	182	70	45	77	96	48	101	38	77	49	92	79	47	23	31	23	38	18	23	40	9879
111	72	63	33	19	40	44	26	37	13	26	20	493	13	16	19	15	31	26	21	31	15	5119
114	40	56	18	8	14	49	18	24	13	24	14	30	20	16	7	5	13	18	14	11	11	4080
1287	378	1265	267	143	267	335	309	267	136	166	135	758	149	138	99	149	137	136	89	139	100	31097
62	79	34	23	18	31	55	11	30	15	29	33	34	23	27	3	14	8	30	10	9	43	3774
69	533	53	13	14	27	34	19	35	26	19	26	44	26	21	3	18	11	15	8	12	47	4001
75	79	49	26	36	34	38	20	40	24	19	16	25	722	11	22	10	16	23	8	10	40	3064
7	21	4	1	1	5		4	7	1	5	14	10	7		1	1	1	5	1		6	393
27	56	1	8	3	10	3	4	3	2	5	6	11	12	1		2		8	3	1	8	577
45	79	18	8	10	7	22	7	26	12	16	25	18	26	11	5	12	4	10	8	6	506	1828
68	95	43	12	28	23	34	20	42	14	6	12	23	58	6	7	21	12	11	6	5	49	2118
353	942	202	91	110	137	186	85	183	94	99	132	165	874	77	41	78	52	102	44	43	699	15755
2	1	1			7	2		2	7		1	1					1	7	3	1		122
10	8	14	25	6	34	84	10	6	21	5	4	12	3	1	31	6	21	290	10	4	1	1870
8	3	10	21	4	23	808	16	7	12	5	2	2	1	2	38	6	7	66	7		2	1603
21	24	23	39	13	34	12	23	9	96	5	1	17	6	6		10	75	30	10	7	4	1505
7	12	20	8	8	27	1	76	5	15	3	2	17	7	1		7	15	15	6	8	1	773
22	26	28	36	19	29	7	16	13	532	6	2	9	10	6	1	11	241	22	8	6	2	1924
1	17	14	16	9	16	1	4	5	153	3	3	11	3	1	4	3	55	10	13	3	3	759
17	15	17	24	28	15	3	6	2	82	3	1	10	1	12		22	55	9	4	5	3	1043
25	13	18	6	17	17	3	11	6	43	3	8	7	5	4	1	3	29	7	8	6	2	679
113	119	145	175	104	202	921	162	55	961	33	24	86	36	43	75	68	499	456	69	40	18	10278
26	31	68	5	12	11	18	13	14	38	4	3	22	19	4	9	13	23	9	6	4	5	1094
25	24	44	20	22	7	2	13	14	64	4	7	23	14	4		10	51	6	5	3	3	1109
18	18	18	9	26	12	8	10	2	55	7	3	14	4	2	8	7	23	9	7	3	7	837
9	17	33	1	24	7	1	6	4	46	1	1	9	9	1		3	26	7		1	2	508
78	90	163	35	84	37	29	42	34	203	16	14	68	46	11	17	33	123	31	18	11	17	3548
5	16	8	4	32	5	8	1	5	25		2	8	23	1	1	3	10	10	1	2	5	495
18	24	6	10	65	5	14	6	6	28	5	4	13	12	6	3	2	8	7	3	3	2	728
23	56	29	11	60	14		4	16	18	16	7	19	27	13		10	8	10		2	19	1026
40	73	40	34	1490	22	26	20	38	42	21	11	25	36	38	1	11	35	19	6	4	12	3635
86	169	83	59	1647	46	48	31	65	113	42	24	65	98	58	5	26	61	46	10	11	38	5884
8	34	8	5	5	9	4	6	9	1	9	22	5	7	10	1		2	5	1	3	3	495
5	11	3			9			9	6	3	31	6	6	4		1	4	3	1	2	1	356
1	2	2	2	1				7	1	1	5	2			1	1			2		6	148
34	48	22	18	13	13	12	8	35	12	18	25	18	16	14	3	4	8	12	9	12	21	1397
2	13	6	1	6	3	1	2	13	3	9	2	2	6	3			1		2	6	3	252
8	10	4	1	8	6	1	2	27	3	12	2	5	1	15		1	5	1	1	1	1	367
15	95	21	15	5	24	1	5	66	17	27	32	22	9	22	1	4	6	9	29	6	10	1551
1	1	1		1				2	1	2	4						1	1	1	1		74
74	214	67	42	39	64	19	23	168	44	81	123	60	45	68	6	11	27	31	46	31	45	4640
36	16	9	33	18	8	21	12	38	9	32	703	11	6	36	11	6	7	10	5	8	10	2281
22	43	17	13	6	10	7	8	35	4	16	110	13	1	26		11	5	7	2	7	6	1292
64	42	34	116	41	30	37	17	929	12	1025	137	27	15	497	5	34	27	33	5	16	17	9630
					1					1				1								13
3	4				1				1		4	2		2		1		1		1		128
		1		4	10		2		3	1		3	1		3		2	1	3	1	1	165
125	105	61	162	69	60	65	39	1002	29	1075	954	56	23	562	19	52	41	52	15	33	34	13509
1			3			41		1	1			6		2	14	7	1	1	1	5	6	906
2480	2260	2308	2113	2347	2128	2132	2161	1965	1838	1715	1524	1478	1347	1239	1260	1256	1264	1204	1027	980	999	128283

Appendix 8

FOREIGN REGIONS OF BACCALAUREATE ORIGIN FOR FORTY LEADING DOCTORATE INSTITUTIONS

		Columbia University	Univ. of Wisconsin	Harvard University	University of Chicago	University of Illinois	Univ. of Calif. (Berkeley)	Cornell University	New York University	University of Michigan	Ohio State University	Yale University	University of Minnesota	State Univ. of Iowa	Stanford University	Massachusetts Inst. of Tech.	Univ. of Pennsylvania	John Hopkins University	Purdue University
PHYSICAL SCIENCES																			
AFRICA	00	6	9	10	3	17	13	9	3	13	4	3	6	7	8	19	2	2	6
NORTH AMERICA	01	45	97	78	105	84	74	47	21	46	26	48	52	7	46	174	6	16	59
SOUTH AMERICA	02	3		1	6	2	4	1	2	1					6	13		1	1
NORTHERN EUROPE	03	20	9	14	14	17	16	14	2	13	2	22	5	1	17	61	2	11	5
CENTRAL EUROPE	04	12	1	5	5	7	8	4	3	5		2	3		5	16	4	2	5
WESTERN EUROPE	05	13	4	10	11	6	19	14	4	15	4	8	7	1	18	41	4	3	7
EASTERN EUROPE	06	18	2	5	7	6	12	4	5	2	4	4	1	1	2	16	4	2	4
WESTERN ASIA	07	36	40	25	17	65	45	21	11	36	34	8	18	10	17	49	10	12	31
EASTERN ASIA	08	26	37	35	36	105	42	61	9	79	46	24	54	28	31	77	21	14	33
AUSTRALASIA	09	7	4	9	10	9	11	8	3	10	5	1	2	1	5	12	2	6	6
FOREIGN TOTAL		186	203	192	214	318	244	183	63	220	125	120	148	56	155	478	55	69	157
BIOLOGICAL SCIENCES																			
AFRICA	00	3	19	1	3	16	30	17		5	17	2	19	2	1		1	9	4
NORTH AMERICA	01	17	229	35	24	38	64	173	3	36	38	41	185	5	9	3	16	23	34
SOUTH AMERICA	02	1	4	5	2	4	7	12	1	1		1	4		1	1	1	12	2
NORTHERN EUROPE	03	3	13	5	4	9	10	19		4	4	8	18		1	1	4	11	1
CENTRAL EUROPE	04	7	12	1	4	4	3	7		2	2	1	7		2		6	6	
WESTERN EUROPE	05	7	11	3	2	4	5	8		2	1	4	7	1	1	1	3	3	1
EASTERN EUROPE	06	4	5	2	2	1	8	10	1	2	3	2	4	1	1		3	3	1
WESTERN ASIA	07	9	92	8	16	57	32	46	2	14	31	7	80	12	7	2	11	21	20
EASTERN ASIA	08	7	49	11	14	34	18	53		31	13	10	47	9	6	1	22	17	7
AUSTRALASIA	09	3	33	6	9	7	23	26		9	7	7	14	2	2	1	1	7	3
FOREIGN TOTAL		61	467	77	80	174	200	371	7	106	116	83	385	32	31	10	68	112	73
SOCIAL SCIENCES																			
AFRICA	00	5	14	9	7			6	2	1	4	5	6	1	1		3	1	2
NORTH AMERICA	01	51	21	115	104	13	42	46	8	27	8	12	42	6	13	14	16	17	7
SOUTH AMERICA.	02	2	3	2	1		1				1	1				4			
NORTHERN EUROPE	03	16	5	27	24	7	9	10	3	7	2	22	11		6	1	2	4	3
CENTRAL EUROPE	04	14	12	9	8	3	5	1	5	8	2	3	6	1	7	1	5	1	3
WESTERN EUROPE	05	18	1	12	8		8	2	4	4	1	3	2		1	1		3	
EASTERN EUROPE	06	18	2	10	11		3	3	6	4		6	2		3	3		2	
WESTERN ASIA	07	34	21	19	30	9	13	21	15	13	14	9	6	5	4	2	12	9	3
EASTERN ASIA	08	26	37	46	34	30	6	12	15	25	2	5	9	12	2	4	19	16	
AUSTRALASIA	09	13	3	20	8	3	6	10	1	8	3	4	6	2	2			2	2
FOREIGN TOTAL		197	119	269	235	65	93	111	59	97	37	70	90	27	39	30	57	55	20
ARTS AND PROFESSIONS																			
AFRICA	00	4	3	1	4	7		2	2	4		2	1	2			2	1	
NORTH AMERICA	01	48	31	90	90	6	22	29	4	31	7	49	4	7	5	2	5	15	1
SOUTH AMERICA	02	3	2	1			3	2		2	4		2	2			1	2	
NORTHERN EUROPE	03	16	12	25	11	2	6	6	7	7	1	13	4	4	3		5	6	
CENTRAL EUROPE	04	20	6	15	9	2	6	8	7	6	1	13	8	3	2		12	2	
WESTERN EUROPE	05	45	8	32	7	4	6	6	8	7	2	11	6	5	4	1	7	6	
EASTERN EUROPE	06	11	2	20	7	3	5		3	5		14	1	1			4	2	
WESTERN ASIA	07	12	5	18	12	4	1	11	6	10	1	18	1	4			8	1	1
EASTERN ASIA	08	12	7	20	19	8	3	5	31	1	3	26	2	4	2		2	2	
AUSTRALASIA	09	8		6	2		1	3	4	3	1	14					1	1	
FOREIGN TOTAL		179	76	228	161	36	53	72	72	76	20	160	29	32	16	3	47	38	2
EDUCATION																			
AFRICA	00	28	2	5	3	1		3		4	8		3		3		1		
NORTH AMERICA	01	102	5	17	21	6	14	11	11	5	1	3	7	1	29		1	1	
SOUTH AMERICA	02	1	1	1	1									1					
NORTHERN EUROPE	03	15	1	7	2					1	1	1	1		2		1		
CENTRAL EUROPE	04	5	4	2	1		1		1	2	1		1						
WESTERN EUROPE	05	3		2		1			2										
EASTERN EUROPE	06	10						1	3	1				2					
WESTERN ASIA	07	70	2	7	7	5	7	10	9	13	7		3	2	4		1	1	
EASTERN ASIA	08	59	2	5	1	5	4	3	7	8	6	3	1	5	4		4		
AUSTRALASIA	09	31	1	4	3	8	9	4		11	4	1	4	6	12			1	
FOREIGN TOTAL		324	18	50	39	26	35	32	33	45	28	8	20	17	54		8	3	
ALL FIELDS COMBINED																			
AFRICA	00	46	47	26	20	41	43	37	7	27	33	12	35	12	13	19	9	13	12
NORTH AMERICA	01	263	383	335	344	147	216	306	47	145	80	153	290	26	102	193	44	72	101
SOUTH AMERICA	02	10	10	10	10	6	15	15	3	4	5	2	6	3	7	18	2	15	3
NORTHERN EUROPE	03	70	40	78	55	35	41	49	12	32	10	66	39	5	29	63	14	32	9
CENTRAL EUROPE	04	58	35	32	27	16	23	20	16	23	6	19	25	4	16	17	27	11	8
WESTERN EUROPE	05	86	24	59	28	15	38	30	18	28	8	26	22	7	24	44	14	15	8
EASTERN EUROPE	06	61	11	37	27	10	28	18	18	14	7	26	8	5	6	19	11	9	5
WESTERN ASIA	07	161	160	77	82	140	98	109	43	86	87	42	108	33	32	53	42	44	55
EASTERN ASIA	08	130	132	117	104	182	73	134	62	144	70	68	113	58	45	82	68	49	40
AUSTRALASIA	09	62	41	45	32	27	50	51	8	41	20	27	26	11	21	13	4	17	11
FOREIGN TOTAL		947	883	816	729	619	625	769	234	544	326	441	672	164	295	521	235	277	252

Appendix 8

FOREIGN REGIONS OF BACCALAUREATE ORIGIN FOR FORTY LEADING DOCTORATE INSTITUTIONS

Northwestern University	Iowa State University of Science and Technology	Indiana University	Princeton University	University of Texas	Pennsylvania State Univ.	Catholic Univ. of America	University of Pittsburgh	Univ. of So. California	Univ. of North Carolina	Univ. of Calif. (Los Angeles)	University of Washington	Michigan State Univ. of Agri. and Applied Science	University of Missouri	Calif. Inst. of Technology	Fordham University	Boston University	Duke University	University of Maryland	Rutgers University	Syracuse University	University of Nebraska	TOTAL
2	3	1	10	2	4			1	3	5		2		3				1		1		178
34	20	5	144	10	18	8	7	5	9	18	19	5	6	50	2	2	2	3	5	6		1409
3	1	1	2		4		1	1	1	1	3			1	1					1		62
8			25	1	8	2	5	3	1	4	5	1		18			1					327
6		3	2	2	4	1	1		1	3	2		1	7	2		1	1	1	2		127
3	2	4	9	1	1	1	2	1	1	3	2		1	15	1		1	1	4	1		243
6			4		2		3	1		2				3	1	2		3				126
5	9	12	14	17	30		14	12	22	9	10	20	7	9	2	6	4	6		6		699
22	19	11	14	23	18	4	8	5	5	15	19	6	14	37			2	7	5	12	4	1008
1	4	3	2	1	1			1	1	1		1	1	4	2		1		1			136
90	58	40	226	57	90	16	41	30	44	61	60	35	30	147	11	10	12	22	16	29	4	4315
	6				2		2	1	4	11	2	10	5	1			1	15	1	1		211
6	74	1		1	13	2	1	2	4	4	21	41	7	8	2	2	5	6	27	3	5	1208
2	1	1							1			2					1		1			68
1	13								3	2	4	3	1	1		2	3	3	5	1		157
2	4						1	1	1		1	5	1			2	1		3	2	1	89
1	7							1			1	3		1	1	1		2	2	1	1	86
2	3			2			3	1	2	1		9			1			1	4		3	85
6	19	4	1	5	3	2	2	4	10	9	13	47	15		5	1	3	7	13	3	7	646
10	17	2	3	2	4	2	3	5	4	4	8	25	6	9		2	6	4	6		1	472
	19		1	1		1		2	1	2	1	1	2	3	1		3	5	3		4	210
30	163	8	5	11	22	7	12	17	30	33	51	146	37	23	10	10	23	43	65	11	22	3232
2	3	3	7					2	5	1		2	1			2	1	1	1	2		100
7	16	8	15	3	2	17	5	3	5	4	13	9			6	1	10	3		7	3	699
3	1		1		1	1		1				1								1		25
6	1	5	7	2	3	1	1			5	5				6	2	1			2	1	207
	2		1	1		3		3			6	2			5	4	1	1	1	1	2	127
1		2	4	1		4	4			4					2	1						91
		5	4					3		2		1	1		3	1			1	2		96
5	3	18	12	2	4	2	1	18	11	1	3	5	4		5	5	2	6		14	3	363
1	4	9	7		2	7	2	10	2	2	14	6	1		5	1	2	6	1	7	3	392
	5		4	2		3		1	4		1	2			3		5			1	1	125
25	35	50	62	11	12	38	13	41	27	19	42	28	7		35	17	22	17	4	37	13	2225
			4	5		1	1		1									1	1	1		50
15		4	22			15	1	9	5	2	11	2			13	11	4	1		1	1	562
		1				2					1					1						29
2		4	12	3		2	2	1		4	6				2	1	1	1				169
7		4	2	3		13	1	2	1	4	1	2			2	5	1	2		1	1	172
5		2	1	1		4	1	2	1	5		1			6	3					1	198
4		2	2			2	1	2							4	2	1					98
5		5	5	3		1		3	1	1	2		1			5	1	1				147
3		3	3	4	2	2		7			5	1	1		1	5	1					185
1	2	3	1		1	4		2		2	1	3			5	3						72
42	2	28	52	19	3	46	7	28	9	18	27	9	2		33	36	9	6	1	3	3	1682
		12		2					1				1			1						78
7	1	7		1	2	4		6	1	3	12	1	1		3	3				1		289
		1																1				7
		1				2	1			1	1							1			1	40
															2	1						21
						1	1															10
		1		1			3								1							23
	1	11		1	1		2	2	1		1	2	2		2	3		4		2	1	184
1		8				2	1	1		1	1	1			1					1		135
1		23			1	2				4		4			7		1	3				145
9	2	64	0	5	4	11	8	9	3	9	15	8	4		16	8	1	9		4	2	932
4	12	16	21	9	6	1	3	4	14	17	2	14	7	4		3	2	18	3	5		617
69	111	25	181	15	35	46	14	25	24	31	76	58	14	58	26	19	21	13	32	18	9	4167
8	3	4	3		5	3	1	2	2	1	4	3		1	1	1	1	1	1	2		191
17	14	10	44	6	11	7	9	4	4	16	21	4	1	19	8	5	6	5	5	3	2	900
15	6	7	5	6	4	17	3	6	3	7	10	9	2	7	11	12	4	4	5	6	4	536
10	9	8	14	3	1	10	8	4	2	12	3	4	1	16	10	5	1	3	6	2	2	628
12	3	8	10	3	2	2	10	7	2	5		10	1	3	10	5	1	4	5	2	3	428
21	32	50	32	28	38	5	19	39	45	20	29	74	29	9	14	20	10	24	13	25	11	2039
37	40	33	27	29	26	17	14	28	11	22	47	39	22	46	7	8	11	17	12	20	8	2192
3	30	29	8	4	3	10		6	6	9	3	11	3	7	18	3	10	8	4	1	5	688
196	260	190	345	103	131	118	81	125	113	140	195	226	80	170	105	81	67	97	86	84	44	12386

Appendix 9

MIGRATION, STATE-BY-STATE, FROM BACCALAUREATE TO DOCTORATE, BY DECADE OF DOCTORATE

↓ BA	PhD →	Me	N H	Vt	Mass	R I	Conn	New Eng.	N Y	N J	Pa	Mid. Atl.	Ohio	Ind	Ill	Mich	Wisc	East No.C	Minn	Iowa	Mo	N D	S D	Nebr	Kans	West No.C	Del	Md	D C
ME	1920-29				27	2	12	41	15	3	3	21	2		13	3		18	1	1						2		7	2
	1930-39				64	4	13	81	38	1	2	41	3		8	4	3	18	1	6	1			1		9		10	1
11	1940-49				62	7	17	86	40	7	10	57	8	5	9	3	5	30	2	1	1					4		1	
	1950-59		2	1	96	10	29	138	94	9	18	121	9	16	17	13	14	69	6	9	3					18		4	6
	1960-61		2		30	8	4	44	25	6	8	39	2	5	4	2	5	18	2	5	1				1	9	1	2	3
	1920-61		4	1	279	31	75	390	212	26	41	279	24	26	51	25	27	153	12	22	6			1	1	42	1	24	12
N H	1920-29				18	2	8	28	28	6	1	35	3		8	1	5	17	3	2						5		1	1
	1930-39				54	3	16	73	50	9	6	65	2	1	21	8	5	37	4	4	1					9		7	2
12	1940-49				36		21	57	58	12	6	76	17	3	26	6	7	59	3	8					1	12		2	1
	1950-59			1	114	6	18	139	116	18	23	157	17	15	30	25	18	105	8	13	5			2	2	30	3	10	6
	1960-61		1		27	4	14	46	23	8	5	36	4	3	7	9	4	27	3	3	1			1		8		1	2
	1920-61		1	1	249	15	77	343	275	53	41	369	43	22	92	49	39	245	21	30	7			3	3	64	3	21	12
VT	1920-29				7		3	10	8	3	3	14			1	1		2		1						1		2	
	1930-39				10	2	4	16	26	4	3	33	1		5		2	8	1	2						3		3	3
13	1940-49				9	3	7	19	35	2	4	41	4	2	4	4	3	17	1	1						2	1	3	2
	1950-59				32	7	13	52	72	7	19	98	8	9	16	13	9	55	4	5	2				1	12	2	3	4
	1960-61		2	1	14		3	20	13	2	3	18	2	2	2	2		8			1				1	2	1	1	1
	1920-61		2	1	72	12	30	117	154	18	32	204	15	13	28	20	14	90	6	9	3				2	20	4	12	10
MASS	1920-29				357	8	56	421	140	15	21	176	7	2	59	18	25	111	6	9	6			2	1	24		38	19
	1930-39				788	13	107	908	263	35	73	371	20	7	74	22	25	148	16	16	11			1	1	45		37	29
14	1940-49			1	810	19	77	907	318	24	55	397	24	24	96	27	39	210	20	18	6			1	1	46	2	16	28
	1950-59		2	5	1941	77	204	2229	661	96	168	925	63	93	265	132	104	657	47	48	38			3	9	145	6	77	69
	1960-61		9		464	12	64	549	138	40	44	222	15	37	62	43	20	177	11	18	2				3	34	1	18	12
	1920-61		11	6	4360	129	508	5014	1520	210	361	2091	129	163	556	242	213	1303	100	109	63			7	15	294	9	186	157
R I	1920-29				14	37	7	58	17	2	3	22			9	1	4	14	2		1					3		4	
	1930-39				28	35	9	72	19	13	5	37	5		11	2	4	22	2	3	1					6		4	8
15	1940-49				41	17	8	66	31	5	7	43	7	1	17	1	5	31	5	3						8		4	9
	1950-59		2		108	32	42	184	69	21	21	111	10	22	20	10	17	79	6	7	4	1			4	22		15	7
	1960-61			1	20	12	10	43	14	4	4	22	2	4	8	5	5	24	2	4	1					7		3	2
	1920-61		2	1	211	133	76	423	150	45	40	235	24	27	65	19	35	170	17	17	7	1			4	46		30	26
CONN	1920-29				22		135	157	41	11	6	58	1	1	19	2	7	30										4	5
	1930-39				57	1	245	303	69	18	13	100	6	1	15	3	9	34	4	4	2					10		10	5
16	1940-49				47	2	218	267	67	17	18	102	6	4	19	8	13	50	5	6	1					12		14	5
	1950-59				144	14	461	619	224	35	42	301	34	30	67	45	28	204	27	28	2			1	7	65	2	21	15
	1960-61				53	2	86	141	55	15	22	92	8	9	17	12	5	51	5	8	1					14		7	4
	1920-61				323	19	1145	1487	456	96	101	653	55	45	137	70	62	369	41	46	6			1	7	101	2	56	34
TOTAL NEW ENG.	1920-29				445	49	221	715	249	40	37	326	13	3	109	26	41	192	12	13	7			2	1	35		56	27
	1930-39				1001	58	394	1453	465	80	102	647	37	9	134	39	48	267	28	35	16			2	1	82		71	48
	1940-49			1	1005	48	348	1402	549	67	100	716	66	39	171	49	72	397	36	37	8			1	2	84	3	40	45
	1950-59		6	7	2435	146	767	3361	1236	186	291	1713	141	185	415	238	190	1169	98	110	54	1		6	23	292	13	130	107
	1960-61		14	2	608	38	181	843	268	75	86	429	33	60	100	73	39	305	23	38	7			1	5	74	3	32	24
	1920-61		20	10	5494	339	1911	7774	2767	448	616	3831	290	296	929	425	390	2330	197	233	92	1		12	32	567	19	329	251
N Y	1920-29				89		42	131	812	18	45	875	7	4	60	16	28	115	10	11	2					23		26	25
	1930-39				137	10	105	252	1714	43	72	1829	35	3	85	34	32	189	17	22	12			2		53		71	52
21	1940-49			2	202	21	95	320	2070	87	113	2270	80	48	171	64	63	426	31	56	16			1	4	108	4	62	60
	1950-59		2	3	662	47	352	1066	5608	260	495	6363	266	298	465	261	239	1529	93	133	61	1		13	54	355	23	181	220
	1960-61			1	173	15	78	267	1266	85	151	1502	48	89	99	85	68	389	25	34	14	1		3	12	89	4	43	54
	1920-61		2	6	1263	93	672	2036	11470	493	876	12839	436	442	880	460	430	2648	176	256	105	2		19	70	628	31	383	411
N J	1920-29				14		9	23	44	73	5	122			6	1	5	12	1	1	1			1		4		12	3
	1930-39				27		22	49	59	133	16	208	2		12	3	12	29		1	1					2		18	7
22	1940-49			1	47	1	28	77	116	159	24	299	9	9	24	4	8	54	10	2	3					15		12	8
	1950-59				119	8	76	203	433	329	94	856	39	43	52	43	45	222	11	20	4			2	5	42	4	43	25
	1960-61		1		40		13	54	90	68	21	179	12	7	17	6	8	50	5	2	3					10	1	10	7
	1920-61		1	1	247	9	148	406	742	762	160	1664	62	59	111	57	78	367	27	26	12			3	5	73	5	95	50
PA	1920-29				55		35	90	112	18	257	387	9	2	57	11	19	98	10	13	2			1		26		55	16
	1930-39				90	8	64	162	260	60	780	1100	35	8	86	44	36	209	13	16	6	1		2	2	40		52	35
23	1940-49				172	13	68	253	320	57	935	1312	58	51	116	37	44	306	15	33	3			2	2	55	3	52	38
	1950-59		1	1	309	23	132	466	703	160	2228	3091	164	119	256	128	94	761	57	51	26			3	20	157	85	133	99
	1960-61	2			74	3	25	104	136	53	503	692	26	42	41	50	25	184	9	13	5				4	31	16	23	24
	1920-61	2	1	1	700	47	324	1075	1531	348	4703	6582	292	222	556	270	218	1558	104	126	42	1		8	28	309	104	315	212
TOTAL MID. ATL.	1920-29				158		86	244	968	109	307	1384	16	6	123	28	52	225	21	25	5			2		53		93	44
	1930-39				254	18	191	463	2033	236	868	3137	72	11	183	81	80	427	30	39	19	1		4	2	95		141	94
	1940-49			3	421	35	191	650	2506	303	1072	3881	147	108	311	105	115	786	56	91	22			3	6	178	7	126	106
	1950-59		3	4	1090	78	560	1735	6744	749	2817	10310	469	460	773	432	378	2512	161	204	91	1		18	79	554	112	357	344
	1960-61	2	1	1	287	18	116	425	1492	206	675	2373	86	138	157	141	101	623	39	49	22	1		3	16	130	21	76	85
	1920-61	2	4	8	2210	149	1144	3517	13743	1603	5739	21085	790	723	1547	787	726	4573	307	408	159	3		30	103	1010	140	793	673

Appendix 9

MIGRATION, STATE-BY-STATE, FROM BACCALAUREATE TO DOCTORATE, BY DECADE OF DOCTORATE

Va	W Va	N C	S C	Ga	Fla	So. Atl.	Ky	Tenn	Ala	Miss	East So.C	Ark	La	Okla	Tex	West So.C	Mont	Wyo	Colo	N M	Ariz	Utah	Mtn.	Wash	Oreg	Cal	Aka	Hwai	Pac.	GRAND TOTAL
						9																				3			3	94
		1				12								1	1	2										3			3	166
		3				4													1				1			12			12	194
3		10		1	2	26	1	3			4			2	5	7	1		2				3	4		11			15	401
		1		1		8			1		1								1				1			1			1	121
3		15		2	2	59	1	3	1		5			3	6	9	1		4				5	4		30			34	976
						2													1				1			3			3	91
		3				12									1	1										6			6	203
		5				8							2		1	3					1		1	1	1	8			10	226
3	1	11			3	37	2	6			8	1	1		5	7		1	6	1			8	5	1	20			26	517
						3		2			2			1	2	3			2				2			7			7	134
3	1	19			3	62	2	8			10	1	3	1	9	14		1	9	1	1		12	6	2	44			52	1171
						2																								29
						6																				1			1	67
						6							1			1										3			3	89
1		6			4	20									1	1		1		1			2	2		6			8	248
		3			1	7		1			1				1	1				1			1	1		3			4	62
1		9			5	41		1			1		1		2	3		1		2			3	3		13			16	495
1		1				59									2	2								2		26			28	821
5		14				85	1	2			3		2		2	4			2		1		3	1		28			29	1596
2		22			1	71	1				1				6	6			1				1	5	2	62			69	1708
6		49		6	13	226	1	18			19		11	7	25	43			16	5	4	5	30	21	17	261		1	300	4574
5		17		1	3	57	1	4	1		6		2	2	8	12		1	7	1	2	4	15	7	3	72		1	83	1155
19		103		7	17	498	4	24	1		29		15	9	43	67		1	26	6	7	9	49	36	22	449		2	509	9854
						4									1	1			1				1			2			2	105
	1	3				16													2				2			3			3	158
1		5				19							1			1										2			2	170
		11		1	3	37	3	3		1	7		1		8	9			3	1		1	5	6	1	14			21	475
2		2			3	12						1				1			1				1	4		7		1	12	122
3	1	21		1	6	88	3	3		1	7	1	2		9	12			7	1		1	9	10	1	28		1	40	1030
1						10		1			1															11			11	267
1		2				18		1			1															14			14	480
1		4				24							1		4	5					2		2	2		15			17	479
3		24		1	6	72	1	6			7		1		15	16			2				2	7		77			84	1370
3		5	1		1	21		3			3			1	1	2			4	1	1	2	8	1		31			32	364
9		35	1	1	7	145	1	11			12		2	1	20	23			6	1	3	2	12	10		148			158	2960
2		1				86		1			1				3	3			2				2	2		45			47	1407
6	1	23				149	1	3			4		2	1	4	7			4		1		5	1		55			56	2670
4		39			1	132	1				1		5		11	16			2		3		5	8	3	102			113	2866
16	1	111		9	31	418	8	36		1	45	1	14	9	59	83	1	2	29	8	4	6	50	45	19	389		1	454	7585
10		28	1	2	8	108	1	10	2		13	1	2	4	12	19		1	15	3	3	6	28	13	3	121		2	139	1958
38	2	202	1	11	40	893	11	50	2	1	64	2	23	14	89	128	1	3	52	11	11	12	90	69	25	712		3	809	16486
		5				56																		1		29			30	1230
4		19			2	148	1	4			5			1	6	7			3				3	2		48			50	2536
6		45				177	1	3			4		3	1	5	9			9				9	2	4	107			113	3436
25	3	122	2	6	65	647	16	34	3		53	1	19	22	60	102		2	64	7		18	91	31	15	438	1		485	10691
7	1	29		5	18	161	1	15			16	2	5	4	27	38		1	15	3	4	1	24	14	3	109		1	127	2613
42	4	220	2	11	85	1189	19	56	3		78	3	27	28	98	156		3	91	10	4	19	127	50	22	731	1	1	805	20506
						15							1			1										2			2	179
2		3				30									1	1								1	1	7			9	328
2		3				25		2			2		3		1	4										23			23	499
7		22		2	8	111	2	1	1		4		3		4	7			9	4		2	15	4	3	73			80	1540
1		2			3	24	2	2			4		1	1	3	5		1	2	1	1	1	6	1	2	22			25	357
12		30		2	11	205	4	5	1		10		8	1	9	18		1	11	5	1	3	21	6	6	127			139	2903
						71		4			4		1			1								1		16			17	694
11	2	22				122	2				2		1	1	1	3			4				4	2	1	32			35	1677
11	3	20				127	1	2			3		2		7	9			5		2		7		1	49			50	2122
21	6	69		6	32	451	7	21	5		33	1	12	10	34	57		1	17	3	3	7	31	13	11	167		2	193	5240
2	1	17	1	1	10	95	2	6			8		3	3	7	13	2	2	14	2	2		22	4	1	56			61	1210
45	12	128	1	7	42	866	12	33	5		50	1	19	14	49	83	2	3	40	5	7	7	64	20	14	320		2	356	10943
		5				142		4			4		2			2								2		47			49	2103
17	2	44			2	300	3	4			7		1	2	8	11			7				7	5	2	87			94	4541
19	3	68				329	2	7			9		8	1	13	22			14		2		16	2	5	179			186	6057
53	9	213	2	14	105	1209	25	56	9		90	2	34	32	98	166		3	90	14	3	27	137	48	29	678	1	2	758	17471
10	2	48	1	6	31	280	5	23			28	2	9	8	37	56	2	4	31	6	7	2	52	19	6	187		1	213	4180
99	16	378	3	20	138	2260	35	94	9		138	4	54	43	156	257	2	7	142	20	12	29	212	76	42	1178	1	3	1300	34352

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MIGRATION, STATE-BY-STATE, FROM BACCALAUREATE TO DOCTORATE, BY DECADE OF DOCTORATE

↓ BA	PhD →	Me	N H	Vt	Mass	R I	Conn	New Eng.	N Y	N J	Pa	Mid. Atl.	Ohio	Ind	Ill	Mich	Wisc	East No.C	Minn	Iowa	Mo	N D	S D	Nebr	Kans	West No.C	Del	Md	D C
OHIO	1920-29				40		31	71	108	14	26	148	210	7	106	21	44	388	13	18	5			3		39		32	9
	1930-39				114	9	74	197	216	36	83	335	642	16	175	53	64	950	17	48	15	1		4	3	88		34	29
31	1940-49				104	18	51	173	234	27	91	352	653	60	174	48	75	1010	29	49	10			3	1	92		45	30
	1950-59				207	19	93	319	482	58	188	728	1315	216	305	218	149	2203	60	109	33			5	18	225	5	56	52
	1960-61				64	4	35	103	95	14	45	154	342	56	88	76	37	599	10	22	8			2	2	44		15	10
	1920-61				529	50	284	863	1135	149	433	1717	3162	355	848	416	369	5150	129	246	71	1		17	24	488	5	182	130
IND	1920-29				24		15	39	68	5	11	84	16	73	95	14	26	224	10	18	3			1		32		12	13
	1930-39				25	4	20	49	99	5	32	136	63	191	143	32	62	491	14	38	8	1		3	2	66		23	16
32	1940-49				52	4	16	72	94	10	34	138	50	276	140	29	49	544	8	22	8	1		1		40		10	26
	1950-59				104	4	30	138	145	17	68	230	115	890	253	110	86	1454	25	65	21			9	8	128	4	27	27
	1960-61		1		19	3	8	31	27	7	27	61	24	225	56	37	10	352	6	13	11			3	1	34	1	5	7
	1920-61		1		224	15	89	329	433	44	172	649	268	1655	687	222	233	3065	63	156	51	2		17	11	300	5	77	89
ILL	1920-29				50	1	21	72	84	3	18	105	12	3	457	11	57	540	16	34	7					57		16	15
	1930-39				78	4	43	125	173	15	38	226	40	15	886	42	72	1055	36	96	26			7	5	170		12	29
33	1940-49			1	81	7	31	120	224	19	56	299	62	57	1137	44	103	1403	40	107	24			6	6	183	1	17	44
	1950-59			1	198	13	49	261	416	49	115	580	96	251	2440	180	217	3184	104	192	118			25	25	464	4	43	50
	1960-61				71	5	18	94	92	7	38	137	16	80	493	64	37	690	18	36	29	1		2	6	92		17	11
	1920-61			2	478	30	162	672	989	93	265	1347	226	406	5413	341	486	6872	214	465	204	1		40	42	966	5	105	149
MICH	1920-29				31	6	14	51	26	4	8	38	12	2	42	190	17	263	8	8	4					20		14	9
	1930-39				31	12	20	63	63	6	19	88	32	5	78	442	32	589	11	24	5			1	1	42		18	6
34	1940-49				36	11	15	62	97	13	22	132	40	40	111	406	28	625	18	30	8			5	1	62		7	18
	1950-59				104	10	28	142	232	27	53	312	110	120	199	1347	102	1878	43	76	26	2		8	9	164	3	35	24
	1960-61	1			19	2	11	33	40	6	19	65	26	33	53	349	44	505	13	17	4	1		1	5	41	1	5	7
	1920-61	1			221	41	88	351	458	56	121	635	220	200	483	2734	223	3860	93	155	47	3		15	16	329	4	79	64
WISC	1920-29				22		5	27	29		3	32	8		39	4	254	305	16	9					1	26		6	12
	1930-39				33	4	18	55	62	6	12	80	18	2	81	17	457	575	29	25	6	3		3		66		7	13
35	1940-49				28	2	7	37	60	6	19	85	21	20	72	21	410	544	32	31	3	2		4	1	73		7	13
	1950-59				66	8	14	88	143	18	27	188	22	70	159	71	907	1229	72	67	32	1		2	5	179		18	31
	1960-61				19	1	3	23	32	2	4	38	10	14	47	16	179	266	22	19	5			2	2	50		6	7
	1920-61				168	15	47	230	326	32	65	423	79	106	398	129	2207	2919	171	151	46	6		11	9	394		44	76
TOTAL	1920-29				167	7	86	260	315	26	66	407	258	85	739	240	398	1720	63	87	19			4	1	174		80	58
EAST	1930-39				281	33	175	489	613	68	184	865	795	229	1363	586	687	3660	107	231	60	5		18	11	432		94	93
NORTH	1940-49			1	301	42	120	464	709	75	222	1006	826	453	1634	548	665	4126	127	239	53	3		19	9	450	1	86	131
CENT	1950-59			1	679	54	214	948	1418	169	451	2038	1658	1547	3356	1926	1461	9948	304	509	230	3		49	65	1160	16	179	184
	1960-61	1	1		192	15	75	284	286	36	133	455	418	408	737	542	307	2412	69	107	57	2		10	16	261	2	48	42
	1920-61	1	1	2	1620	151	670	2445	3341	374	1056	4771	3955	2722	7829	3842	3518	21866	670	1173	419	13		100	102	2477	19	487	508
MINN	1920-29				22		11	33	26	3	1	30	1		32	8	12	53	123	11	1			2	1	138		6	10
	1930-39				43	2	30	75	62	4	11	77	10	1	41	9	46	107	305	37	4	8		8		362		20	16
41	1940-49				34	1	16	51	80	11	22	113	17	26	79	17	45	184	381	52	15	1		10		459		12	23
	1950-59				58	1	30	89	125	16	31	172	31	57	142	58	79	367	698	101	36	15		16	9	875		30	24
	1960-61				17	2	8	27	32	4	10	46	6	16	28	16	18	84	167	25	3	3		7	5	210		4	4
	1920-61				174	6	95	275	325	38	75	438	65	100	322	108	200	795	1674	226	59	27		43	15	2044		72	77
IOWA	1920-29				21		13	34	48	2	8	58	1		65	5	27	98	11	211	1			1	1	225		10	7
	1930-39				25	1	16	42	109	5	15	129	21	5	85	13	45	169	22	406	5	1		5	4	443		8	13
42	1940-49				30	1	11	42	100	5	20	125	22	29	77	20	50	198	29	324	10			10	2	375	1	12	12
	1950-59				55	1	21	77	141	13	34	188	40	76	145	67	78	406	74	721	31	4	1	22	16	869	4	13	19
	1960-61				10	1	5	16	29		8	37	7	19	35	19	16	96	17	170	5	1	3	9	3	208			4
	1920-61				141	4	66	211	427	25	85	537	91	129	407	124	216	967	153	1832	52	6	4	47	26	2120	5	43	55
MO	1920-29				20		13	33	44	2	6	52	4		72	7	17	100	8	13	43			2	2	68		11	3
	1930-39				34	1	35	70	105	9	23	137	7	9	94	19	27	156	20	63	192			9	9	293		16	7
43	1940-49				26	2	19	47	85	8	17	110	19	11	88	20	19	157	20	57	237			7	3	324		13	16
	1950-59			1	53	1	29	84	150	13	37	200	46	83	170	51	62	412	26	83	636			11	47	803	1	12	26
	1960-61				12		5	17	19	2	15	36	10	15	49	9	17	100	5	31	139			11	12	198		8	10
	1920-61			1	145	4	101	251	403	34	98	535	86	118	473	106	142	925	79	247	1247			40	73	1686	1	60	62
N D	1920-29				3		2	5	6			6			7		3	10	4	1		1				6		3	
	1930-39				7		1	8	9	2	1	12	2	2	8	3	6	21	13	15	1	11		3	1	44		4	
44	1940-49				2	1	2	5	14			14	2	1	11	3	13	30	14	16	1	6				37		2	
	1950-59				6		2	8	11	1	11	23	8	15	14	10	22	69	18	14	8	30		3	6	79	1	3	4
	1960-61				3			3	4		1	5			3	7	3	13	6	4	1	8			1	20		1	
	1920-61				21	1	7	29	44	3	13	60	12	18	43	23	47	143	55	50	11	56		6	8	186	1	13	4
S D	1920-29				4	1	1	6	7			7	2		11		6	19	4	7						11		1	
	1930-39				3		2	5	17	3	7	27	7	2	18	4	11	42	19	33	3	1			2	58		7	2
45	1940-49				2	2	5	9	4	1	7	12	11	7	22	5	24	69	9	25	3					37		2	
	1950-59				11			11	13	5	5	23	11	7	28	16	15	77	27	47	10	3	4	4	17	112		2	6
	1960-61				4			4	2	2	2	6		1	7	3	6	17	3	8	2	2	6	4	1	26		2	
	1920-61				24	3	8	35	43	11	21	75	31	17	86	28	62	224	62	120	18	6	10	8	20	244		14	8

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MIGRATION, STATE-BY-STATE, FROM BACCALAUREATE TO DOCTORATE, BY DECADE OF DOCTORATE

Va	W Va	N C	S C	Ga	Fla	So. Atl.	Ky	Tenn	Ala	Miss	East So.C	Ark	La	Okla	Tex	West So.C	Mont	Wyo	Colo	N M	Ariz	Utah	Mtn.	Wash	Oreg	Cal	Aka	Hwai	Pac.	GRAND TOTAL
		1				42		1			1				1	1								2		24			26	716
5		8			1	77	4	3			7				1	1			1				1	5	1	60			66	1722
	1	16		1	1	94	3	3			6		2	3	5	10			6				6	5	1	58			64	1807
10		59		5	39	226	9	25	2	1	37	2	11	6	40	59		3	32	2	5	1	43	22	14	167			203	4043
1		17			18	61	2	2	1		5		5	2	14	21		1	12		2	1	16	5	3	45		1	54	1057
16	1	101		6	59	500	18	34	3	1	56	2	18	11	61	92		4	51	2	7	2	66	39	19	354		1	413	9345
2		2				29		1			1			1		1			2				2	1		16			17	429
1		7				47	2	4			6		5	4	2	11			6		1		7	5		27			32	845
2	1	4			1	44		1			1		2		3	5			10				10	4	1	24			29	883
2	2	23		6	15	106	7	13	3		23	1	10	4	30	45	1	2	26	3	3	8	43	13	5	103			121	2288
2		5			8	28	3	4	1		8		2	1	4	7			7	2	1		10	7	3	34			44	575
9	3	41		6	24	254	12	23	4		39	1	19	10	39	69	1	2	51	5	5	8	72	30	9	204			243	5020
		1				32		2			2								2		1		3	2		40			42	853
5		8				54		9			9		4	1	5	10			8		1		9	4	1	60			65	1723
6		11			3	82	1	8			9		7	1	7	15			17	1	1		19	1	5	80			86	2216
8	1	35	1	3	35	180	13	34	3		50	3	15	9	44	71		6	69	6	1	6	88	45	24	318			387	5265
2		6	1	4	16	57	2	4	1	1	8		2	6	14	22			24	1	1	3	29	9	13	73			95	1224
21	1	61	2	7	54	405	16	57	4	1	78	3	28	17	70	118		6	120	8	5	9	148	61	43	571			675	11281
						23							1			1										20			20	416
2		11				37	1	2			3		2	3	1	6			2				2	3	1	24			28	858
3		5			1	34							1		2	3			9				9	3	2	34			39	966
3	1	20			18	104	4	18		1	23		11	5	18	34			31	3	3	7	44	22	12	152			186	2887
2		8	1	1	3	28		3			3			5	3	8		1	10		2	3	16	2	7	41			50	749
10	1	44	1	1	22	226	5	23		1	29		15	13	24	52		1	52	3	5	10	71	30	22	271			323	5876
		2				20																		2		7			9	419
1		2				23		1			1				1	1			2				2	2	1	24			27	830
1	1	7			1	30		1			1		4	1	3	8				1			1		2	26			28	807
1		13			11	74	2	13			15	1	2	7	8	18		3	26	3	5	5	42	8	6	105			119	1952
1		2			2	18	1				1		1	2	5	8		2	13	1	1		17	8	5	20			33	454
4	1	26			14	165	3	15			18	1	7	10	17	35		5	41	5	6	5	62	20	14	182			216	4462
2		6				146		4			4		1	1	1	3			4		1		5	7		107			114	2833
14		36			1	238	7	19			26		11	8	10	29			19		2		21	19	4	195			218	5978
12	3	43		1	7	284	4	13			17		16	5	20	41			42	2	1		45	13	11	222			246	6679
24	4	150	1	14	118	690	35	103	8	2	148	7	49	31	140	227	1	14	184	17	17	27	260	110	61	845			1016	16435
8		38	2	5	47	192	8	13	3	1	25		10	16	40	66		4	66	4	7	7	88	31	31	213		1	276	4059
60	7	273	3	20	173	1550	54	152	11	3	220	7	87	61	211	366	1	18	315	23	28	34	419	180	107	1582		1	1870	35984
						16									1	1					1		1			8			8	280
	1	1			1	39							1			1			1				1	2	1	20			23	685
2		2				39							1		4	5			7			1	8	6	2	43			51	910
5	1	19			11	90	3	6			9		4	3	18	25		8	54	2		3	67	31	12	117			160	1854
1		1				10	1	3			4		2	4	2	8		2	12		3	1	18	8	3	39			50	457
8	2	23			12	194	4	9			13		8	7	25	40		10	74	2	4	5	95	47	18	227			292	4186
1						18													1				1			11			11	445
	1	1				23		1			1		4	1	2	7			2				2	4	1	27			32	848
1		4				30	2	2			4		2			2		1	5			2	8	5	1	32			38	822
2	1	27		2	8	76	6	8	3		17		11	5	18	34	1	8	54	3		4	70	23	19	115			157	1894
		5			2	11		1			1		1	3	2	6		2	17		1		20	3	4	27			34	429
4	2	37		2	10	158	8	12	3		23		18	9	22	49	1	11	79	3	1	6	101	35	25	212			272	4438
		3				17		8			8								2				2	1		14			15	295
1	2	9				35	2	20			22		2		4	6			5				5	1	1	27			29	753
2		5				36		8			8		4	4	9	17		2	14		1		17	1		42			43	759
3		15		1	11	69	5	28	1	1	35	8	8	11	32	59		3	52	7	1	4	67	15	4	102			121	1850
3		8			6	35		8			8	6	2	5	5	18		1	13	1	2	1	18	2	2	20			24	454
9	2	40		1	17	192	7	72	1	1	81	14	16	20	50	100		6	86	8	4	5	109	20	7	205			232	4111
						3																		2		3			5	35
		1				5								1		1			1				1	1		5			6	98
						2		1			1		1			1			3				3	5	1	6			12	105
					1	9	1	1			2			1	1	2	1	1	11				13	11	6	16			33	238
		1		1	1	4							1			1	2		3	1			6	2	1	2			5	57
		2		1	2	23	1	2			3		2	2	1	5	3	1	18	1			23	21	8	32			61	533
						1		1			1															1			1	46
					2	11								1	1	2			4		1		5			7			7	157
		1				3							1	1	2	4			9				9	1	1	8			10	153
2					2	12	1				1		2	6	4	12		7	33	1		3	44	6	7	19			32	324
		1			1	4	1	1			2			5		5		3	6				9	1		5			6	79
2		2			5	31	2	2			4		3	13	7	23		10	52	1	1	3	67	8	8	40			56	759

Appendix 9

MIGRATION, STATE-BY-STATE, FROM BACCALAUREATE TO DOCTORATE, BY DECADE OF DOCTORATE

↓ BA	PhD →	Me	N H	Vt	Mass	R I	Conn	New Eng.	N Y	N J	Pa	Mid. Atl.	Ohio	Ind	Ill	Mich	Wisc	East No.C	Minn	Iowa	Mo	N D	S D	Nebr	Kans	West No.C	Del	Md	D C
NEBR	1920-29				12		6	18	24	3	2	29	2		34	3	5	44	11	13				24	1	49		5	3
	1930-39				12	1	13	26	62	5	12	79	11	7	48	12	27	105	18	33	9	2		78	3	143		12	23
46	1940-49				14	1	12	27	53	4	9	66	13	5	42	6	24	90	21	40	6			93	3	163	1	4	4
	1950-59				21	1	13	35	69	6	14	89	13	39	62	30	43	187	35	71	24	1		236	9	376		5	9
	1960-61				4		2	6	7	1	4	12	2	7	11	7	10	37	7	12	7			75	5	106		1	3
	1920-61				63	3	45	112	215	19	41	275	41	58	197	58	109	463	92	169	46	3		506	21	837	1	27	42
KANS	1920-29				14		14	28	38	1	10	49	7	2	66	2	21	98	7	19	4			2	34	66		13	3
	1930-39				27	4	16	47	62	6	23	91	25	4	72	16	39	156	20	58	15			5	70	168		9	12
47	1940-49				21	3	10	34	62	1	13	76	30	13	81	12	30	166	24	53	14			13	73	177		7	15
	1950-59				62	2	12	76	95	14	27	136	40	71	132	58	59	360	37	80	50			25	254	446	2	14	18
	1960-61				8		2	10	15		8	23	6	12	23	17	17	75	5	19	7			4	79	114		5	3
	1920-61				132	9	54	195	272	22	81	375	108	102	374	105	166	855	93	229	90			49	510	971	2	48	51
TOTAL	1920-29				96	1	60	157	193	11	27	231	17	2	287	25	91	422	168	275	49	1		31	39	563		49	26
WEST	1930-39				151	9	113	273	426	34	92	552	83	30	366	76	201	756	417	645	229	23		108	89	1511		76	73
NORTH	1940-49				129	11	75	215	398	30	88	516	114	92	400	83	205	894	498	567	286	7		133	81	1572	2	52	70
CENT	1950-59			1	266	6	107	380	604	68	159	831	189	348	693	290	358	1878	915	1117	795	53	5	317	358	3560	8	79	106
	1960-61				58	3	22	83	108	9	48	165	31	70	156	78	87	422	210	269	164	14	9	110	106	882		21	24
	1920-61			1	700	30	377	1108	1729	152	414	2295	434	542	1902	552	942	4372	2208	2873	1523	98	14	699	673	8088	10	277	299
DEL	1920-29				3			3			2	2				1		1										2	
	1930-39				1			1	2		2	4			2			2										1	
51	1940-49				1		1	2	3	1	4	8				1		1	2	1						3	1	2	1
	1950-59				3		2	5	12	2	15	29	7	6	10	3	4	30	3		1				1	5	1	3	3
	1960-61				2			2	2		4	6		2			1	3	3							3	1	2	1
	1920-61				10		3	13	19	3	27	49	7	8	12	5	5	37	8	1	1				1	11	3	10	5
MD	1920-29				6		7	13	28	3	7	38	1	1	6	2	2	12		2						2		159	23
	1930-39				11	1	8	20	26	7	13	46	1		13	5	3	22	1	7	3	1				12		232	29
52	1940-49				24	1	16	41	54	3	18	75	7	6	9	3	5	30	4	4	2			1		11	1	197	26
	1950-59				50	4	15	69	113	19	58	190	28	23	40	20	22	133	6	10	5				1	22	5	295	81
	1960-61				10		6	16	23	3	17	43	11	7	11	13	6	48	1		4					5	3	66	14
	1920-61				101	6	52	159	244	35	113	392	48	37	79	43	38	245	12	23	14	1		1	1	52	9	949	173
D C	1920-29				5		4	9	22		4	26		1	7	1	2	11	1					1		2		9	129
	1930-39				18	2	4	24	32	5	12	49	6	4	9	3	2	24	2	4	3				1	10		27	182
53	1940-49				14	2	11	27	47	4	16	67	8	5	25	4	8	50	4	2						6		24	353
	1950-59				29	3	6	38	100	13	51	164	16	14	42	13	17	102	11	4	12			1	1	29	2	53	369
	1960-61				11		4	15	11	6	11	28	2	3	3	3	2	13	2		1				2	5		16	39
	1920-61				77	7	29	113	212	28	94	334	32	27	86	24	31	200	20	10	16			2	4	52	2	129	1072
VA	1920-29				17		6	23	43	7	3	53	2		23	1	1	27	4							4		52	7
	1930-39				25	1	17	43	67	9	23	99	14	1	38	6	3	62	5	3	2			1		11		29	4
54	1940-49				24	1	14	39	76	10	16	102	19	10	33	11	12	85	4	10	2					16		21	5
	1950-59				65	7	23	95	112	15	67	194	33	26	66	37	30	192	10	27	9			3	2	51	1	37	25
	1960-61				10	2	5	17	27	10	19	56	7	5	9	4	4	29	3	3						6		3	4
	1920-61				141	11	65	217	325	51	128	504	75	42	169	59	50	395	26	43	13			4	2	88	1	142	45
W VA	1920-29				1		3	4	16	2	4	22	7		11	1	4	23	2	3						5		8	1
	1930-39				4	1	3	8	32	4	22	58	12	2	10	1	6	31	5	10	4					19		10	
55	1940-49				8	1	5	14	25	4	22	51	13	8	14	7	7	49	8	14	1					23	1	6	3
	1950-59				18		7	25	54	3	66	123	61	30	26	27	18	162	1	11	4			1	3	20	2	10	13
	1960-61				4		2	6	12	1	15	28	15	10	6	5	7	43	2	1	2					5	3	2	1
	1920-61				35	2	20	57	139	14	129	282	108	50	67	41	42	308	18	39	11			1	3	72	6	36	18
N C	1920-29				7		9	16	32	2	4	38	3		10	2	7	22		2	1					3		11	1
	1930-39				20	2	17	39	51	4	9	64	8	1	21	4	12	46	1	7	2			1	1	12		19	2
56	1940-49				22	2	15	39	56	9	9	74	12	3	25	4	12	56	4	10	1			1		16		11	2
	1950-59				63	1	26	90	140	24	58	222	34	28	53	26	21	162	11	22	10				3	46	2	19	16
	1960-61				14	3	5	22	24	5	8	37	4	9	12	17	8	50	4	6					2	12		8	4
	1920-61				126	8	72	206	303	44	88	435	61	41	121	53	60	336	20	47	14			2	6	89	2	68	25
S C	1920-29				4		4	8	10	8	1	19	3		9		4	16	2	4	3					9		3	3
	1930-39				6	1	9	16	35	7	7	49	6	2	15	3	6	32	5	1				1		7		5	1
57	1940-49				8	1	9	18	30	5	6	41	10	5	11	7	7	40	2	10						12		9	2
	1950-59			1	16		5	22	64	9	20	93	11	19	16	15	11	72	3	9	2			2	3	19		9	
	1960-61				1		4	5	7		3	10	6	9	2	3		20	1	2	1					4		4	1
	1920-61			1	35	2	31	69	146	29	37	212	36	35	53	28	28	180	13	26	6			3	3	51		30	7
GA	1920-29				5		6	11	22	2	3	27			7		5	12	1	3	1					5		15	1
	1930-39			1	16	2	9	28	36	5	4	45	7	2	22	6	8	45	2	3	2					7		25	2
58	1940-49				18	1	10	29	43	8	11	62	12	5	20	6	19	62	3	8				2		13		2	2
	1950-59				46	1	15	62	94	14	16	124	43	20	58	22	32	175	13	14				1	1	29	2	16	8
	1960-61				12	1	6	19	20	2	5	27	7	5	6	9	6	33	1	4	1					6	1	4	1
	1920-61			1	97	5	46	149	215	31	39	285	69	32	113	43	70	327	20	32	4			3	1	60	3	62	14

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MIGRATION, STATE-BY-STATE, FROM BACCALAUREATE TO DOCTORATE, BY DECADE OF DOCTORATE

Va	W Va	N C	S C	Ga	Fla	So. Atl.	Ky	Tenn	Ala	Miss	East So.C	Ark	La	Okla	Tex	West So.C	Mont	Wyo	Colo	N M	Ariz	Utah	Mtn.	Wash	Oreg	Cal	Aka	Hwai	Pac.	GRAND TOTAL
						8		1			1															13			13	162
		2			1	38		2			2				2	2			4				4	4		24			28	427
		2				11		4			4		2	2	2	6		1	9		1		11	7	2	35			44	422
2		6		1	3	26		4			4		2	7	11	20		6	52			7	65	21	18	60			99	901
		6		1	1	12		2			2							1	12	2			15	1	6	14		1	22	212
2		16		2	5	95		13			13		4	9	15	28		8	77	2	1	7	95	33	26	146		1	206	2124
						16													2				2		1	22			23	282
1		3				25	1	3			4		2	2	3	7			8				8	4	3	35			42	548
1		8				31		9			9		2	7	4	13			25		1		26	4	4	46			54	586
2		10	1	1	6	54	3	9			12	3	7	34	33	77		6	69	5	1	6	87	15	11	84			110	1358
		5		1	2	16		2			2	1	1	10	8	20		2	14		1		17	2	4	17			23	300
4		26	1	2	8	142	4	23			27	4	12	53	48	117		8	118	5	3	6	140	25	23	204			252	3074
1		3				79		10			10				1	1			5		1		6	3	1	72			76	1545
2	4	17			4	176	3	26			29		9	5	12	26			25		1		26	16	6	145			167	3516
6		22				152	2	24			26		13	14	21	48		4	72		3	3	82	29	11	212			252	3757
16	2	77	1	5	42	336	19	56	4	1	80	11	34	67	117	229	2	39	325	18	2	27	413	122	77	513			712	8419
4		27		3	13	92	2	17			19	7	7	27	17	58	2	11	77	4	7	2	103	19	20	124		1	164	1988
29	6	146	1	8	59	835	26	133	4	1	164	18	63	113	168	362	4	54	504	22	14	32	630	189	115	1066		1	1371	19225
						2		1			1																			9
						1																								8
						4																								18
1		7		1	1	17							3			3				1			1	1		3			4	94
		1				5																								19
1		8		1	1	29		1			1		3			3				1			1	1		3			4	148
1		1				184													1				1							250
3		6				270													1				1	1		5			6	377
1	1	12				238									1	1										11			11	407
8		18		1	8	416	3	2			5		5	4	8	17			5			4	9	3	1	33		1	38	899
2		5	1		1	92	1	2			3		1		1	2			4			1	5			12			12	226
15	1	42	1	1	9	1200	4	4			8		6	4	10	20			11			5	16	4	1	61		1	67	2159
						138		1			1								1				1							188
1		2			1	213		1			1				1	1										10			10	332
1		2				380							1		1	2										5			5	537
5		13		1	3	446	1	3			4	2	2	2	4	10			4		1	1	6	1	3	22			26	825
		2			1	58		1			1								2		2		4	1		5			6	130
7		19		1	5	1235	1	6			7	2	3	2	6	13			7		3	1	11	2	3	42			47	2012
43		2				104		1			1															4			4	216
107		20			2	162		8			8				1	1					1		1			3			3	390
118	2	38				184	1	12			13		5		3	8			2				2		1	11			12	461
209	2	90	1	9	19	393	5	15	1		21		7	3	15	25			4	1			5	2	3	22			27	1003
53		21	1	1	8	91	1	4			5		4		4	8			2				2			9			9	223
530	4	171	2	10	29	934	7	40	1		48		16	3	23	42			8	1	1		10	2	4	49			55	2293
1						10		2			2															1			1	67
1	19	6				36		1			1								1				1			2			2	156
1	15	7			1	34	2	1			3		1		2	3			3				3	2		6			8	188
10	52	13		2	15	117	7	10			17		1	2	10	13			5			1	6	2	1	10			13	496
2	6	4		2	3	23	2	3			5	1	1	2	1	5								2		5			7	122
15	92	30		4	19	220	11	17			28		3	4	13	21			9			1	10	6	1	24			31	1029
5		40	3			60		3			3															2			2	144
8	1	124				154	1	16			17			1	1	2										5			5	339
15		138			1	167	1	9			10		3		1	4				1			1		1	10			11	378
16		378	3	11	17	462	3	28	3		34		7	2	20	29			6				6	1	3	31		1	36	1087
11		95	2	3	15	138	2	6			8		2	1	8	11			2			1	3	1		16		1	18	299
55	1	775	8	14	33	981	7	62	3		72		12	4	30	46			8	1		1	10	2	4	64		2	72	2247
3		5	7			21		3			3				1	1										2			2	79
14		43	6			69	1	14			15		1		1	2			1				1	1		4			5	196
8		47	1	1	1	69	1	21			22															3			3	205
20		100	28	12	25	194	5	36			41		5	3	12	20		1					1	2	3	14			19	481
10		13	9	4	7	48	1	7	3		11			1	2	3			1				1							102
55		208	51	17	33	401	8	81	3		92		6	4	16	26		1	2				3	3	3	23			29	1063
1		3				20		2			2				1	1										4			4	82
4	2	23				56		9			9		1		2	3			1				1			8			8	202
4		24		6		38		6			6		4		8	12										7			7	229
14		70		91	44	245	7	50	8	1	66	1	8	3	23	35			6				6	2	2	24			28	770
4		17		38	13	78	1	8	6		15		7		6	13			1				1			8			8	200
27	2	137		135	57	437	8	75	14	1	98	1	20	3	40	64			8				8	2	2	51			55	1483

Appendix 9

MIGRATION, STATE-BY-STATE, FROM BACCALAUREATE TO DOCTORATE, BY DECADE OF DOCTORATE

↓ BA PhD →	Me	N H	Vt	Mass	R I	Conn	New Eng.	N Y	N J	Pa	Mid. Atl.	Ohio	Ind	Ill	Mich	Wisc	East No.C	Minn	Iowa	Mo	N D	S D	Nebr	Kans	West No.C	Del	Md	D C
FLA 1920-29				1		1	2	5		2	7			3		1	4		1	1					2		1	
1930-39				2	1	4	7	19	3	1	23	4	4	15	2	4	29	1	5						6		5	2
59 1940-49				7	1	2	10	25	3	10	38	11	6	16	4	13	50	6	4				1		11		2	1
1950-59			1	25	1	12	39	80	9	23	112	34	25	43	20	18	140	9	18	6			1	4	38	2	7	8
1960-61				3		1	4	16		5	21	7	4	6	6	3	26	1	1	2					4		4	
1920-61			1	38	3	20	62	145	15	41	201	56	39	83	32	39	249	17	29	9			2	4	61	2	19	11
TOTAL 1920-29				49		40	89	178	24	30	232	16	2	76	8	26	128	10	15	6			1		32		260	165
SO. 1930-39			1	103	11	71	186	300	44	93	437	58	16	145	30	44	293	22	40	16	1		3	2	84		353	222
ATL. 1940-49				126	10	83	219	359	47	112	518	92	48	153	47	83	423	37	63	6			5		111	3	274	395
1950-59			2	315	17	111	445	769	108	374	1251	267	191	354	183	173	1168	67	115	49			9	19	259	17	449	523
1960-61				67	6	33	106	142	27	87	256	59	54	55	60	37	265	18	17	11				4	50	8	109	65
1920-61			3	660	44	338	1045	1748	250	696	2694	492	311	783	328	363	2277	154	250	88	1		18	25	536	28	1445	1370
KY 1920-29				4		5	9	15	1	4	20	3		17	6	5	31		6	1	1				8		3	2
1930-39				11		8	19	29	3	8	40	23	4	28	14	8	77	6	12	4					22		5	1
61 1940-49				21		14	35	38	7	10	55	23	7	40	12	22	104	4	10	1				2	17		5	6
1950-59				28		9	37	81	8	20	109	54	83	77	41	28	283	16	31	27	1		5	5	85	1	10	15
1960-61				6	1	1	8	13	2	7	22	13	20	18	10	4	65		3	2				1	6		2	1
1920-61				70	1	37	108	176	21	49	246	116	114	180	83	67	560	26	62	35	2		5	8	138	1	25	25
TENN 1920-29				8		4	12	22	5		27	2	1	11	3	2	19	2	3	1				1	7		11	3
1930-39				6	3	19	28	36	5	3	44	9	3	27	11	6	56	3	12	4				2	21		5	2
62 1940-49				11	1	9	21	50	5	13	68	21	9	36	9	15	90	3	9	3			1		16		9	1
1950-59		1		40	2	17	60	88	9	19	116	28	46	60	34	34	202	7	24	15			2	2	50		14	4
1960-61				10		6	16	16	2	7	25	15	13	18	14	7	67	2	2	4	1			1	10		4	2
1920-61		1		75	6	55	137	212	26	42	280	75	72	152	71	64	434	17	50	27	1		3	6	104		43	12
ALA 1920-29				3		1	4	10	1		11	2		6	1	7	16		2				1		3		7	1
1930-39				6		2	8	21	1	4	26	8	2	21	2	4	37	1	5	1			3		10		1	
63 1940-49				6	3	4	13	41	5	10	56	11	6	18	16	8	59	2	9	1			3		15		7	3
1950-59			1	19	1	5	26	112	9	27	148	37	30	47	26	23	163	9	18	4				2	33		15	12
1960-61				2		1	3	16		8	24	9	6	10	4	1	30	1	2	3				2	8		6	3
1920-61			1	36	4	13	54	200	16	49	265	67	44	102	49	43	305	13	36	9			7	4	69		36	19
MISS 1920-29				4		2	6	6			6	2	2	5		2	11	1	4	1					6		7	
1930-39				4	2	4	10	17	1	5	23	4	5	17	6	11	43	3	13	3					19		12	2
64 1940-49				2		5	7	12		4	16	3	4	16	1	11	35	2	5	3					10		2	
1950-59				14	1	5	20	26		9	35	11	27	29	10	14	91	2	7	4			2	5	20		7	5
1960-61				2			2	6		2	8	1	10	3		1	15			1				2	3			
1920-61				26	3	16	45	67	1	20	88	21	48	70	17	39	195	8	29	12			2	7	58		28	7
TOTAL 1920-29				19		12	31	53	7	4	64	9	3	39	10	16	77	3	15	3	1		1	1	24		28	6
EAST 1930-39				27	5	33	65	103	10	20	133	44	14	93	33	29	213	13	42	12			3	2	72		23	5
SOUTH 1940-49				40	4	32	76	141	17	37	195	58	26	110	38	56	288	11	33	8			4	2	58		23	10
CENT 1950-59		1	1	101	4	36	143	307	26	75	408	130	186	213	111	99	739	34	80	50	1		9	14	188	1	46	36
1960-61				20	1	8	29	51	4	24	79	38	49	49	28	13	177	3	7	10	1			6	27		12	6
1920-61		1	1	207	14	121	344	655	64	160	879	279	278	504	220	213	1494	64	177	83	3		17	25	369	1	132	63
ARK 1920-29						1	1	7			7			7	1		8	1	4						5		2	4
1930-39				8		3	11	22	1	4	27	1		18	1	2	22	2	10	3					15		5	2
71 1940-49				7	1	1	9	22	1	1	24	6	5	17	2	6	36	5	5	3			1		14		2	2
1950-59				17	1	4	22	31	2	5	38	11	17	22	12	14	76	3	11	18			3	9	44	1	9	3
1960-61				2		1	3	3	1	3	7	2	4	7	4	6	23	1	1	5		1	1	4	13	1	1	1
1920-61				34	2	10	46	85	5	13	103	20	26	71	20	28	165	12	31	29		1	5	13	91	2	19	12
LA 1920-29				2		2	4	4	1	1	6	3		8		1	12	1	4	1					6		3	1
1930-39				10		10	20	20	1	3	24	3	1	20	4	7	35	3	5	1					9			1
72 1940-49				11	1	3	15	26	3	7	36	12	2	15	5	14	48	7	14	2				1	24		1	5
1950-59				29	2	6	37	52	6	12	70	23	28	49	27	21	148	10	28	14	1		1	5	59	2	9	15
1960-61				3		5	8	10	2	4	16	3	7	6	4	3	23	1	6	4			1		12		1	3
1920-61				55	3	26	84	112	13	27	152	44	38	98	40	46	266	22	57	22	1		2	6	110	2	14	25
OKLA 1920-29				6		1	7	7		2	9			12	4	4	20	1	4	2				1	8		2	2
1930-39				2		9	11	24	4	1	29	1	1	25	7	14	48	5	26	7			1	6	45		1	2
73 1940-49				8	1	9	18	30	2	2	34	13	11	27	6	23	80	5	12	4			2	2	25		3	4
1950-59				19	1	11	31	57	5	22	84	33	42	52	31	44	202	19	37	20			15	14	105		13	1
1960-61				7		3	10	12			12	4	9	19	8	11	51	4	13	11			1	6	35	1	3	
1920-61				42	2	33	77	130	11	27	168	51	63	135	56	96	401	34	92	44			19	29	218	1	22	9
TEX 1920-29				18		13	31	31	4	6	41	2		50	5	10	67	1	9	1				1	12		9	3
1930-39				49	4	25	78	75	6	17	98	9	1	62	13	17	102	4	27	2	1		1	2	37		9	13
74 1940-49				52	6	14	72	80	9	15	104	18	5	61	17	29	130	7	23	13			3	2	48		9	8
1950-59				86	8	27	121	138	16	47	201	54	70	114	53	57	348	31	70	33			6	21	161	1	24	20
1960-61				26	1	7	34	33	6	9	48	12	20	28	21	19	100	8	15	10		1	2	7	43	1	11	3
1920-61				231	19	86	336	357	41	94	492	95	96	315	109	132	747	51	144	59	1	1	12	33	301	2	62	47

Appendix 9

MIGRATION, STATE-BY-STATE, FROM BACCALAUREATE TO DOCTORATE, BY DECADE OF DOCTORATE

Va	W Va	N C	S C	Ga	Fla	So. Atl.	Ky	Tenn	Ala	Miss	East So.C	Ark	La	Okla	Tex	West So.C	Mont	Wyo	Colo	N M	Ariz	Utah	Mtn.	Wash	Oreg	Cal	Aka	Hwai	Pac.	GRAND TOTAL
						1													1				1			1			1	18
		3			15	25	1	7			8															1			1	99
4		14			22	43		5			5		1		2	3										6			6	166
4	2	45		8	192	268	3	9			12		12	4	14	30		1	6	1			8	9	3	19			31	678
1		10		2	65	82	1	5	4	1	11		6	1	9	16					1	1	2	4		5		1	10	176
9	2	72		10	294	419	5	26	4	1	36		19	5	25	49		1	7	1	1	1	11	13	3	32		1	49	1137
54		51	10			540		13			13				2	2			3				3			14			14	1053
138	22	227	6		18	986	3	56			59		2	1	6	9			4		1		5	2		38			40	2099
152	18	282	1	7	25	1157	5	54			59		15		18	33			5	1			6	2	2	59			63	2589
287	56	734	32	136	324	2558	34	153	12	1	200	3	50	23	106	182		2	36	3	1	6	48	23	19	178		2	222	6333
83	6	168	13	50	113	615	9	36	13	1	59	1	21	5	31	58			12		3	3	18	8		60		2	70	1497
714	102	1462	62	193	480	5856	51	312	25	2	390	4	88	29	163	284		2	60	4	5	9	80	35	21	349		4	409	13571
3						8		8			8								1				1			2			2	87
3		8			1	18	25	13			38								2				2			3			3	219
4		13				28	35	14			49		4	1	2	7			1				1	2	2	7			11	307
6	1	26		1	21	81	142	47	2	2	193	2	8	11	16	37		2	4	1	2	3	12	2	2	20			24	861
3		14		1	17	38	42	13	1		56		2	3	2	7			1		1		2		1	8			9	213
19	1	61		2	39	173	244	95	3	2	344	2	14	15	20	51		2	9	1	3	3	18	4	5	40			49	1687
2		3				19		30			30								1				1			4			4	119
8		24				39		85			85		1		2	3								2		4			6	282
3		19				32	1	62			63		3	3	5	11			1				1	1		10			11	313
12	1	55	1	7	29	123	8	299	8	2	317		13	8	24	45			5			1	6	7	1	29			37	956
5		14		7	15	47	4	68	3	6	81	2	5		8	15			3				3	3		10			13	277
30	1	115	1	14	44	260	13	544	11	8	576	2	22	11	39	74			10			1	11	13	1	57			71	1947
1						9		2			2				1	1										2			2	48
4		9				14		17			17				1	1										3			3	116
11		16		1		38	1	17			18		5		5	10			1				1	1		7			8	218
13	1	44		15	24	124	3	56	78	2	139		21	2	27	50			4			2	6	3	3	19			25	714
1		10	1	3	7	31		15	57		72		7	3	2	12			2				2	3		5			8	190
30	1	79	1	19	31	216	4	107	135	2	248		33	5	36	74			7			2	9	7	3	36			46	1286
1		2				10		2			2		1			1			1				1							43
3		20				37	1	14			15		4		4	8			1				1			3			3	159
5		15			1	23		10			10		8		5	13		1					1			1			1	116
6	1	33	1	6	5	64	1	26	5	19	51		23	5	24	52			4				4	1		13			14	351
		3		3	10	16		9	5	5	19	2	8	3	4	17										3			3	83
15	1	73	1	9	16	150	2	61	10	24	97	2	44	8	37	91		1	6				7	1		20			21	752
7		5				46		42			42		1		1	2			3				3			8			8	297
18		61			1	108	26	129			155		5		7	12			3				3	2		13			15	776
23		63		1	1	121	37	103			140		20	4	17	41		1	3				4	4	2	25			31	954
37	4	158	2	29	79	392	154	428	93	25	700	2	65	26	91	184		2	17	1	2	6	28	13	6	81			100	2882
9		41	1	14	49	132	46	105	66	11	228	4	22	9	16	51			6		1		7	6	1	26			33	763
94	4	328	3	44	130	799	263	807	159	36	1265	6	113	39	132	290		3	32	1	3	6	45	25	9	153			187	5672
		2				8													1				1			2			2	32
		3			1	11		14			14			1	1	2			1		1		2	1		1			2	106
2		10				16	1	4			5		10	4	6	20			2				2			8			8	134
1		16		2	6	38	3	34	1	3	41	40	18	29	30	117		1	8				9	2	1	13			16	401
2		4			2	11	1	5	3		9	23	8	4	15	50	1		3				4		1	5			6	126
5		35		2	9	84	5	57	4	3	69	63	36	38	52	189	1	1	15		1		18	3	2	29			34	799
						4		2			2		2		1	3														37
		5				6		10			10		18	1	4	23										5			5	132
1		9				16		4			4		44		15	59			2				2	1		12			13	217
2		21	1	1	19	70	5	25	5	2	37	7	242	17	65	331		1	12	3		1	17	3	3	27			33	802
		1		1	6	12		5	4	2	11	5	61	1	13	80			1	1			2	1	1	9			11	175
3		36	1	2	25	108	5	46	9	4	64	12	367	19	98	496		1	15	4		1	21	5	4	53			62	1363
						4		1			1				1	1								1		7			8	58
	1	2			1	7		2			2			28	6	34			1		1		2			20			20	198
2		3				12		12			12		6	31	13	50			8			1	9	4	3	21			28	268
1	1	13		2	10	41	2	19		2	23	6	17	281	61	365		3	25	4	2	1	35	9	6	62			77	963
		8				12	4	3	1		8		4	108	14	126			11				11	1	3	19			23	288
3	2	26		2	11	76	6	37	1	2	46	6	27	448	95	576		3	45	4	3	2	57	15	12	129			156	1775
1		4				17		1			1		1		34	35			1				1			24			24	229
9		14				45		10			10			2	224	226			6		1		7	1	1	26			28	631
2		14				33	3	14			17		11	3	330	344			18				18		2	47			49	815
4		37		5	17	108	5	41	7	1	54	5	52	50	1135	1242		5	64	2	2	4	77	14	10	129			153	2465
1		8			3	27		8	1	1	10	2	18	15	281	316		1	16	3	3	5	28	3	2	21			26	632
17		77		5	20	230	8	74	8	2	92	7	82	70	2004	2163		6	105	5	6	9	131	18	15	247			280	4772

Appendix 9

MIGRATION, STATE-BY-STATE, FROM BACCALAUREATE TO DOCTORATE, BY DECADE OF DOCTORATE

↓ BA PhD →		Me	N H	Vt	Mass	R I	Conn	New Eng.	N Y	N J	Pa	Mid. Atl.	Ohio	Ind	Ill	Mich	Wisc	East No.C	Minn	Iowa	Mo	N D	S D	Nebr	Kans	West No.C	Del	Md	D C
TOTAL	1920-29				26		17	43	49	5	9	63	5		77	10	15	107	4	21	4				2	31		16	10
WEST	1930-39				69	4	47	120	141	12	25	178	14	3	125	25	40	207	14	68	13	1		2	8	106		15	18
SOUTH	1940-49				78	9	27	114	158	15	25	198	49	23	120	30	72	294	24	54	22			6	5	111		15	19
CENT	1950-59				151	12	48	211	278	29	86	393	121	157	237	123	136	774	63	146	85	1		25	49	369	4	55	39
	1960-61				38	1	16	55	58	9	16	83	21	40	60	37	39	197	14	35	30		2	5	17	103	3	16	7
	1920-61				362	26	155	543	684	70	161	915	210	223	619	225	302	1579	119	324	154	2	2	38	81	720	7	117	93
MONT	1920-29				1			1	4		2	6			6		2	8	5	2	1					8		3	1
	1930-39				6		1	7	11	1	7	19	3	3	16	6	7	35	11	9	2					22		2	
81	1940-49				9	1	2	12	15	2	10	27	2	2	15	4	14	37	11	8	3			1	2	25		5	1
	1950-59				7		5	12	19	3	19	41	8	19	20	17	21	85	10	26	5			1	2	44	1	2	4
	1960-61				1			1	5		2	7	1	5	4	5	3	18	2	1	3			1	1	8			1
	1920-61				24	1	8	33	54	6	40	100	14	29	61	32	47	183	39	46	14			3	5	107	1	12	7
IDA	1920-29						2	2	1			1			2		1	3											
	1930-39				3		5	8	10		3	13	4		6	3	9	22	4	10						14		3	1
82	1940-49				4		3	7	7		5	12	4	2	8	5	11	30	10	2	1			1		14		3	
	1950-59		1		2		6	9	19	1	4	24	6	14	14	11	4	49	4	10	6				2	22	1	2	4
	1960-61				1		2	3	3		1	4		1	6	2	2	11		2	1					3			
	1920-61		1		10		18	29	40	1	13	54	14	17	36	21	27	115	18	24	8			1	2	53	1	8	5
WYO	1920-29				1		1	2	2			2									1					1			
	1930-39						2	2	9		1	10	2	1	4	2	1	10		2	3					5			1
83	1940-49				2		2	4	7			7		1	2	1	6	10	3	2	2					7			1
	1950-59				2	1	1	4	11	2	2	15	2	3	9	4	7	25	7	7	1			5		20		1	1
	1960-61						1	1	1	2		3			3		2	5		1				1		2			1
	1920-61				5	1	7	13	30	4	3	37	4	5	18	7	16	50	10	12	7			6		35		1	4
COLO	1920-29				14		6	20	18	5	5	28	2	1	29	6	11	49	3	6						9		10	
	1930-39				21		15	36	54	4	4	62	4	2	34	13	9	62	8	22	8			3		41		13	5
84	1940-49				20	1	11	32	34	1	9	44	11	7	43	5	16	82	16	20	5			4		45		5	3
	1950-59				38	2	19	59	110	16	21	147	25	42	88	38	24	217	25	51	23			11	10	120		10	12
	1960-61				11		2	13	26	2	6	34	3	3	9	8	6	29	5	8	4			3	3	23	1	1	2
	1920-61				104	3	53	160	242	28	45	315	45	55	203	70	66	439	57	107	40			21	13	238	1	39	22
N M	1920-29						1	1	2			2			1	1		2	1	1						2			
	1930-39				3		2	5	1			1			1	1		2	1	4						5			1
85	1940-49				5		1	6	3		2	5	1	1	10	1	1	14	3	5	1				1	10		2	
	1950-59				10	1	1	12	23	3	7	33	4	9	12	9	6	40	1	12	7			3	2	25		2	3
	1960-61				1		1	2	6		2	8	1	2	1	2	1	7	1	3	1					5			1
	1920-61				19	1	6	26	35	3	11	49	6	12	25	14	8	65	7	25	9			3	3	47		4	5
ARIZ	1920-29								2			2							2							2		1	
	1930-39				2		6	8	6			6	1	1	12	3	3	20		1	2					3		1	1
86	1940-49				2		1	3	12		2	14	3	3	8	1	11	26	1	3				1		5		1	1
	1950-59				10		1	11	24	2	6	32	10	9	19	9	10	57	5	10					1	16		3	1
	1960-61				2			2	7		2	9	5	3	1	1	3	13		6						6		1	
	1920-61				16		8	24	51	2	10	63	19	16	40	14	27	116	8	20	2			1	1	32		7	3
UTAH	1920-29				4			4	19	3	1	23	2		16	1	9	28	5	7	1					13		2	3
	1930-39				7	1	2	10	36	5	2	43	7	5	28	8	23	71	11	26	6			2		45		5	6
87	1940-49				19	1	6	26	55	9	10	74	16	11	32	14	40	113	14	42	6			1	4	67		2	4
	1950-59				35		7	42	109	19	22	150	37	46	43	28	60	214	30	48	3			7	11	99	2	10	2
	1960-61				14	1	2	17	13	8	5	26	7	7	13	6	13	46	4	4	2				2	12		2	3
	1920-61				79	3	17	99	232	44	40	316	69	69	132	57	145	472	64	127	18			10	17	236	2	21	18
NEV	1920-29						1	1	1			1			1			1											
	1930-39				2			2	4			4			2	2		4											1
88	1940-49				2		1	3			1	1			1			1	1							1		1	
	1950-59				3		1	4		1		1		3	3	1		7	1	3						4	1		
	1960-61								3			3	1					1											
	1920-61				7		3	10	8	1	1	10	1	3	7	3		14	2	3						5	1	1	1
TOTAL	1920-29				20		11	31	49	8	8	65	4	1	55	8	23	91	16	16	3					35		16	4
MTN.	1930-39				44	1	33	78	131	10	17	158	21	12	103	38	52	226	35	74	21			5		135		24	16
	1940-49				63	3	27	93	133	12	39	184	37	27	119	31	99	313	59	82	18			8	7	174		19	10
	1950-59		1		107	4	41	153	315	47	81	443	92	145	208	117	132	694	83	167	45			27	28	350	5	30	27
	1960-61				30	1	8	39	64	12	18	94	18	21	37	24	30	130	12	25	11			5	6	59	1	4	8
	1920-61		1		264	9	120	394	692	89	163	944	172	206	522	218	336	1454	205	364	98			45	41	753	6	93	65
WASH	1920-29				12		5	17	19	5	4	28	2	1	19	4	11	37	6	2	3					11		5	4
	1930-39				26	2	14	42	49	8	12	69	14	3	28	11	20	76	14	7	12					33		11	8
91	1940-49			1	32	5	25	63	67	6	9	82	14	5	39	9	24	91	14	12	11			1		38		2	11
	1950-59				73	3	17	93	132	15	16	163	19	28	90	30	45	212	36	24	19			7	3	89		13	18
	1960-61				6		2	8	24	4	5	33	2	11	9	8	10	40	2	6	2			2	1	13		6	3
	1920-61			1	149	10	63	223	291	38	46	375	51	48	185	62	110	456	72	51	47			10	4	184		37	44

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MIGRATION, STATE-BY-STATE, FROM BACCALAUREATE TO DOCTORATE, BY DECADE OF DOCTORATE

Va	W Va	N C	S C	Ga	Fla	So. Atl.	Ky	Tenn	Ala	Miss	East So.C	Ark	La	Okla	Tex	West So.C	Mont	Wyo	Colo	N M	Ariz	Utah	Mtn.	Wash	Oreg	Cal	Aka	Hwai	Pac.	GRAND TOTAL
1		6				33		4			4		3		36	39			2				2	1		33			34	356
9	1	24			2	69		36			36		18	32	235	285			8		3		11	2	1	52			55	1067
7		36				77	4	34			38		71	38	364	473			30			1	31	5	5	88			98	1434
8	1	87	1	10	52	257	15	119	13	8	155	58	329	377	1291	2055		10	109	9	4	6	138	28	20	231			279	4631
3		21		1	11	62	5	21	9	3	38	30	91	128	323	572	1	1	31	4	3	5	45	5	7	54			66	1221
28	2	174	1	11	65	498	24	214	22	11	271	88	512	575	2249	3424	1	11	180	13	10	12	227	41	33	458			532	8709
						4									1	1										5			5	33
						2													1				1	3	1	14			18	104
						6																		2		12			14	121
		2				9								4	3	7	13	1	4			8	26	20	15	45			80	304
		1				2									2	2	8		1		1	2	12	11	2	7			20	70
		3				23								4	6	10	21	1	6		1	10	39	36	18	83			137	632
								2			2															3			3	11
		1				5		1			1								2		1		3	3	3	13			19	85
		5				8													4		1		5	11	1	8			20	96
		2		1		10		1			1		1	1	2	4		2	6		2	7	17	28	22	39			89	225
		2				2								1	2	3			7		1	5	13	8	6	6			20	59
		10		1		25		4			4		1	2	4	7		2	19		5	12	38	50	32	69			151	476
																														5
						1																		1		2			3	31
						1							1			1		1					1	1		3			4	35
		1				3		1			1			2	3	5		9	3			3	15	7	3	16			26	114
1						2												1	2		1	1	5	1	1	2			4	22
1		1				7		1			1		1	2	3	6		11	5		1	4	21	10	4	23			37	207
		1				11									1	1			4		1		5			14			14	137
						18		1			1		1		2	3			44		2		46	2	2	22			26	295
		6				14		1			1			2	1	3		1	59		1		61	3	3	41			47	329
		6		2	8	38	1	5			6	1	1	8	22	32		11	234	2	4	15	266	29	13	132	1		175	1060
1		7		1	2	15		1			1		1	1	1	3		3	63	2		1	69	4	4	35			43	230
1		20		3	10	96	1	8			9	1	3	11	27	42		15	404	4	8	16	447	38	22	244	1		305	2051
																										2			2	9
						1									1	1					1		1		1	11			12	28
		1				3									2	2			1				1	1		11			12	53
		2		1	3	11		2	1		3		1	3	10	14		1	16	19	2	2	40	4	1	29			34	212
2		1			2	6								2	3	5			5	9	1		15		1	8			9	57
2		4		1	5	21		2	1		3		1	5	16	22		1	22	28	4	2	57	5	3	61			69	359
						1																				5			5	10
		1				3							1		2	3								2		15			17	60
		2				4		1			1								2		3		5			29			29	87
3		2			3	12		2			2		1		6	7	1		10	1	16	7	35	1	4	62			67	239
		3				4		1			1				3	3			2	1	13	1	17			14			14	69
3		8			3	24		4			4		2		11	13	1		14	2	32	8	57	3	4	125			132	465
						5																				38			38	111
						11							1			1								5	2	75			82	263
1		4				11							2		2	4			2	2	2	12	18	3	2	88			93	406
2		18		1	1	36	1	2	1		4		3	5	12	20		2	13	2	2	265	284	42	15	167			224	1073
1		1				7		1			1			2	2	4		1	8	1	2	76	88	15	8	48			71	272
4		23		1	1	70	1	3	1		5		6	7	16	29		3	23	5	6	353	390	65	27	416			508	2125
																										1			1	4
						1							1			1			1				1			2			2	15
		1				2							1		1	2			1				1	1		8			9	20
		1				2													1	1		1	3	4	3	13			20	41
														1		1						1	1			6	1		7	13
		2				5							2	1	1	4			3	1		2	6	5	3	30	1		39	93
		1				21		2			2				2	2			4		1		5			68			68	320
		2				42		2			2		4		5	9			48		4		52	16	9	154			179	881
1		19				49		2			2		4	2	6	12		2	69	2	7	12	92	22	6	200			228	1147
5		34		5	15	121	2	13	2		17	1	7	23	58	89	14	26	287	25	26	308	686	135	76	503	1		715	3268
5		15		1	4	38		3			3		1	7	13	21	8	5	88	13	19	87	220	39	22	126	1		188	792
11		71		6	19	271	2	22	2		26	1	16	32	84	133	22	33	496	40	57	407	1055	212	113	1051	2		1378	6408
						9		1			1								1				1	41		21			62	166
3		2				24									1	1			1				1	159	2	55			216	462
		5			1	19									6	6			4			1	5	132	4	80			216	520
		5			4	40	1	4			5		4	5	11	20		1	22	4	4	2	33	370	47	215			632	1287
		4			1	14							1		4	5			7		3	2	12	102	25	45		1	173	298
3		16			6	106	1	5			6		5	5	22	32		1	35	4	7	5	52	804	78	416		1	1299	2733

Appendix 9

MIGRATION, STATE-BY-STATE, FROM BACCALAUREATE TO DOCTORATE, BY DECADE OF DOCTORATE

↓ BA PhD →		Me	N H	Vt	Mass	R I	Conn	New Eng.	N Y	N J	Pa	Mid. Atl.	Ohio	Ind	Ill	Mich	Wisc	East No.C	Minn	Iowa	Mo	N D	S D	Nebr	Kans	West No.C	Del	Md	D C
OREG	1920-29				5		5	10	18	4	1	23	1		14	3	13	31	4	15						19		4	2
	1930-39				12	4	9	25	46	2	10	58	8	6	28	8	27	77	9	23	4			1	[illegible]	39		4	4
92	1940-49				25	3	8	36	35	1	5	41	16	13	28	8	20	85	4	15	2			3		24		2	5
	1950-59			1	50	2	16	69	72	9	16	97	9	28	41	28	21	127	22	22	5			2	7	58	2	12	2
	1960-61				8	1	1	10	9	1	2	12		11	13	4	8	36	2	4	1		1		2	10		2	
	1920-61			1	100	10	39	150	180	17	34	231	34	58	124	51	89	356	41	79	12		1	6	11	150	2	24	13
CAL	1920-29				46		17	63	48	4	4	56	6		25	3	7	41	5	6	3				1	15		10	
	1930-39				77	4	52	133	116	21	20	157	11	3	59	14	24	111	12	9	7			2	1	31		18	5
93	1940-49				100	10	32	142	125	26	13	164	16	14	92	29	34	185	27	31	8			7	3	76		15	19
	1950-59				254	8	72	334	311	60	64	435	55	68	165	86	68	442	50	45	37			7	14	153	4	57	37
	1960-61			1	69	1	20	91	73	15	17	105	14	16	39	25	8	102	11	10	10			1	8	40		13	5
	1920-61			1	546	23	193	763	673	126	118	917	102	101	380	157	141	881	105	101	65			17	27	315	4	113	66
ALASK	1920-29																												
	1930-39																												
94	1940-49				1		2	3																					
	1950-59								1		2	3				1		1											
	1960-61				1			1			1	1																	
	1920-61				2		2	4	1		3	4				1		1											
HAWAI	1920-29								1			1			1			1											
	1930-39								1			1			1		3	4	1							1			
95	1940-49				1	1	1	3	6			6	2		1		1	4	1	1						2			
	1950-59				8		4	12	18		2	20	4	3	9	3	9	28	3	4					1	8		4	
	1960-61				3			3	2			2	1	2	3	1	2	9	2		1					3		1	1
	1920-61				12	1	5	18	28		2	30	7	5	15	4	15	46	7	5	1				1	14		5	1
P R	1920-29								2			2																	
	1930-39				2			2	3			3			1			1											
98	1940-49				1			1	13	1	7	21	2		8	5		15	2					1		3		1	
	1950-59			1	6			7	36	2	12	50	5	7	6	8	4	30	4		2				1	7			2
	1960-61				1			1	7		3	10		1	1	3	2	7	1		1				1	3			
	1920-61			1	10			11	61	3	22	86	7	8	16	16	6	53	7		3			1	2	13		1	2
TOTAL	1920-29				63		27	90	88	13	9	110	9	1	59	10	31	110	15	23	6				1	45		19	6
PAC.	1930-39				117	10	75	202	215	31	42	288	33	12	117	33	74	269	36	39	23			3	3	104		33	17
	1940-49			1	160	19	68	248	246	34	34	314	50	32	168	51	79	380	48	59	21			12	3	143		20	35
	1950-59			2	391	13	109	515	570	86	112	768	92	134	311	156	147	840	115	95	63			16	26	315	6	86	59
	1960-61			1	88	2	23	114	115	20	28	163	17	41	65	41	30	194	18	20	15		1	3	12	69		22	9
	1920-61			4	819	44	302	1169	1234	184	225	1643	201	220	720	291	361	1793	232	236	128		1	34	45	676	6	180	126
TOTAL	1920-29				1043	57	560	1660	2142	243	497	2882	347	103	1564	365	693	3072	312	490	102	2		41	45	992		617	346
U.S.	1930-39			1	2047	149	1132	3329	4427	525	1443	6395	1157	336	2629	941	1255	6318	702	1213	409	31		148	118	2621		830	586
	1940-49			6	2323	181	971	3481	5199	600	1729	7528	1439	848	3186	982	1446	7901	896	1225	444	10		191	115	2881	16	655	821
	1950-59		11	18	5535	334	1993	7891	12241	1468	4446	18155	3159	3353	6560	3576	3074	19722	1840	2543	1462	60	5	476	661	7047	182	1411	1425
	1960-61	3	16	4	1388	85	482	1978	2584	398	1115	4097	721	881	1416	1024	683	4725	406	567	327	18	12	137	188	1655	38	340	270
	1920-61	3	27	29	12336	806	5138	18339	26593	3234	9230	39057	6823	5521	15355	6888	7151	41738	4156	6038	2744	121	17	993	1127	15196	236	3853	3448
	1920-29				6		1	7	7			7	2		4		3	9	1							1		1	
	1930-39				3		1	4	11	1		12			1		2	3	2	1						3			
AFRICA	1940-49				10		3	13	19	6		25	4	2	6	5	6	23	3	2					1	6		4	
	1950-59				36		7	43	52	15	18	85	24	17	54	27	27	149	26	21	5				9	61		26	4
	1960-61				8		1	9	10	2	2	14	4	9	6	10	10	39	3		4				2	9			1
	1920-61				63		13	76	99	24	20	143	34	28	71	42	48	223	35	24	9				12	80		31	5
NORTH	1920-29				62		24	86	61	19	10	90			97	4	21	122	29	5	1				1	36		13	10
AND	1930-39				103	5	32	140	110	37	26	173	9	4	93	23	55	184	43	15	2				4	64		19	3
CENTR.	1940-49				106	14	25	145	145	36	21	202	22	19	108	20	74	243	62	28	4			2		96		16	12
AMER	1950-59		1	1	289	21	66	378	344	106	77	527	62	106	230	135	201	734	137	79	20			7	13	256	3	30	27
	1960-61				52	3	8	63	80	20	15	115	16	28	45	31	35	155	19	10	2		1		4	36		11	4
	1920-61		1	1	612	43	155	812	740	218	149	1107	109	157	573	213	386	1438	290	137	29		1	9	22	488	3	39	56
	1920-29				1			1	1			1																5	1
SOUTH	1930-39				1			1	1			1					1	1	2		1					3		3	
AMER	1940-49				6		1	7	6	1	1	8		1	4	1		6	1	1					1	3		5	1
	1950-59				21			21	18	2	8	28	3	5	14	5	9	36	2	2	1				1	6	1	4	3
	1960-61				6		1	7	7	1	1	9	2	4	8	1		15	1	3	1					5			
	1920-61				35		2	37	33	4	10	47	5	10	26	7	10	58	6	6	3				2	17	1	17	5
	1920-29				19		3	22	15	3	6	24	1	1	11	7	3	23	4	1						5		4	
	1930-39				29		7	36	24	7	6	37	1		12	7	6	26	2	4				2		8		7	3
NORTH	1940-49				20		12	32	24	4	3	31	2	2	5	1	8	18	4	2	1					7		5	1
EUROPE	1950-59				79	6	29	114	80	26	26	132	10	13	66	13	19	121	21	9	6				2	38	1	16	7
	1960-61				19	2	15	36	25	11	15	51	3	5	19	8	4	39	8	3	1				1	13	1	6	4
	1920-61				166	8	66	240	168	51	56	275	17	21	113	36	40	227	39	19	8			2	3	71	2	38	15

Appendix 9

MIGRATION, STATE-BY-STATE, FROM BACCALAUREATE TO DOCTORATE, BY DECADE OF DOCTORATE

Va	W Va	N C	S C	Ga	Fla	So. Atl.	Ky	Tenn	Ala	Miss	East So.C	Ark	La	Okla	Tex	West So.C	Mont	Wyo	Colo	N M	Ariz	Utah	Mtn.	Wash	Oreg	Cal	Aka	Hwai	Pac.	GRAND TOTAL
						6																		4	1	26			31	120
	1	2				11		2			2				2	2								18	17	61			96	310
1		2				10							1		5	6		1	4				5	23	35	62			120	327
1		4			4	25	1	2			3		1		7	8		3	17	1	2	8	31	66	159	178			403	821
1		2			4	9		1			1		1		3	4	1		9		1	2	13	23	39	33	1		96	191
3	1	10			8	61	1	5			6		3		17	20	1	4	30	1	3	10	49	134	251	360	1		746	1769
						10																		3	1	328			332	517
2		2				27							1	1	5	7			7		1		8	8	1	890			899	1373
5		8			2	49		4			4		2	1	7	10			1	1	4	1	7	14	10	1262			1286	1923
7		19			13	137	1	5			6	2	8	6	45	61	1	3	58	4	8	20	94	97	85	3545		6	3733	5395
1		10		1	6	36	1	1	1		3		7	1	9	17			12	3	5	6	26	34	16	818		1	869	1289
15		39		1	21	259	2	10	1		13	2	18	9	66	95	1	3	78	8	18	27	135	156	113	6843		7	7119	10497
																														3
																					1		1	1		4	1		6	11
								1			1																1		1	4
								1			1										1		1	1		4	2		7	18
																														2
													1			1										4		1	5	12
																			1				1	1		4			5	21
		1				5													3			1	4	4	3	7		2	16	93
						2									1	1						1	1			3		1	4	25
		1				7							1		1	2			4			2	6	5	3	18		4	30	153
																														2
																										1			1	7
		2			1	4		1			1		2		1	3														48
		3			2	7			1		1		4		4	8			1				1			3			3	114
								1			1		1		2	3														25
		5			3	11		2	1		3		7		7	14			1				1			4			4	196
						25		1			1								1				1	48	2	375			425	807
5	1	6				62		2			2		2	1	8	11			8		1		9	185	20	1011		1	1217	2164
6		17			4	82		5			5		5	1	19	25		1	10	1	4	2	18	170	49	1408			1627	2842
8		32			23	214	3	11	1		15	2	17	11	67	97	1	7	101	9	15	31	164	538	294	3952	1	8	4793	7721
2		16		1	11	61	1	4	1		6		10	1	19	30	1		28	3	9	11	52	159	80	899	2	3	1143	1832
21	1	71		1	38	444	4	23	2		29	2	34	14	113	163	2	8	148	13	29	44	244	1100	445	7645	3	12	9205	15366
67		78	10			1118		81			81		7	1	46	54			24		3		27	63	3	769			835	10721
209	31	440	6		28	2130	43	277			320		54	50	295	399			126		13		139	248	42	1750		1	2041	23692
230	24	589	1	9	38	2383	55	242			297		157	65	489	711		8	247	6	20	18	299	255	94	2495			2844	28325
454	77	1596	39	222	789	6195	295	975	142	38	1450	87	599	599	2027	3312	19	105	1178	104	74	444	1924	1062	601	7370	3	13	9049	74745
134	8	402	18	83	287	1580	77	232	94	16	419	45	173	205	508	931	14	26	354	37	59	123	613	299	170	1810	3	10	2292	18290
1094	140	3105	74	314	1142	13406	470	1807	236	54	2567	132	990	920	3365	5407	33	139	1929	147	169	585	3002	1927	910	14194	6	24	17061	155773
						1																				3			3	28
																					1		1			1			1	24
1		1				6									1	1			1				1			11			11	86
2		11			8	51	3	1		2	6		11	1	11	23			5		1	1	7	4	11	58			73	498
		4		1	3	9							1	1	5	7			2		1	2	5			15			15	107
3		16		1	11	67	3	1		2	6		12	2	17	31			8		3	3	14	4	11	88			103	743
						23							1			1								1		29			30	388
3	1	1				27		1			1		1			1			1				1	6		57			63	654
4		8			1	41							1	1	3	5		1	2		1		4	16	5	90			111	847
11	1	31		1	6	110	1	5			6		5	5	19	29		1	6	1		11	19	73	41	230			344	2403
5		5		1	3	29	1	1			2			2	1	3	1	1	1			4	7	8	10	37			55	465
23	2	45		2	10	230	2	7			9		8	8	23	39	1	3	10	1	1	15	31	104	56	443			603	4757
						6																								8
						3																								9
						6																			1	4			5	35
		3				11		1			1		1		3	4								3		18			21	128
1						1							4			4								1	1	6			8	49
1		3				27		1			1		5		3	8								4	2	28			34	229
						4																				8			8	86
						10																		2		14		1	17	134
		1				7									1	1			1				1			6			6	103
1		5			1	31	2				2		1	1	3	5			7	2		2	11	15	9	61			85	539
		4	1		2	18	1	2			3			1	3	4								5	3	25			33	197
1		10	1		3	70	3	2			5		1	2	7	10			8	2		2	12	22	12	114		1	149	1059

Appendix 9

MIGRATION, STATE-BY-STATE, FROM BACCALAUREATE TO DOCTORATE, BY DECADE OF DOCTORATE

↓ BA	PhD →	Me	N H	Vt	Mass	R I	Conn	New Eng.	N Y	N J	Pa	Mid. Atl.	Ohio	Ind	Ill	Mich	Wisc	East No.C	Minn	Iowa	Mo	N D	S D	Nebr	Kans	West No.C	Del	Md	D C
CENTR. EUROPE	1920-29				1			1	6	1	2	9	1		3	2	1	7	3					1		4		1	3
	1930-39				10	1	5	16	17	1	4	22	2		7	3	12	24	3	3	1					7		1	2
	1940-49				21	1	7	29	29	1	6	36	2	1	11	6	6	26	3	1						4		3	1
	1950-59				33	2	6	41	75	7	29	111	9	13	38	15	13	88	14	6	8			1	2	31	1	7	12
	1960-61				6		2	8	17	1	7	25	2	5	9	7	4	27	2		1			2		5		3	2
	1920-61				71	4	20	95	144	11	48	203	16	19	68	33	36	172	25	10	10			4	2	51	1	15	20
WEST EUROPE	1920-29				13		1	14	12	2	6	20			2	1	2	5	3	1				1		5		2	
	1930-39				12		1	13	22	1	6	29	2	1	8	6	2	19	2							2		9	1
	1940-49			1	27		6	34	21	6	6	33	2	1	7	3	2	15	3	4						7		1	3
	1950-59				62	5	12	79	89	10	20	119	7	14	30	20	13	84	14	9	3			1	5	32	1	9	14
	1960-61				8	1	6	15	16	2	3	21	4	2	9	2	5	22		2	1					3			2
	1920-61			1	122	6	26	155	160	21	41	222	15	18	56	32	24	145	22	16	4			2	5	49	1	21	20
EAST EUROPE	1920-29				2		4	6	10	2	5	17			3		1	4	1							1		2	3
	1930-39				7	1	2	10	21	1	3	25	1		2	3	2	8		2				1		3		1	
	1940-49				10		4	14	16	1	6	23	1	1	4	1		7	1					1		2		2	
	1950-59				41		14	55	62	5	16	83	6	10	28	17	8	69	4	4	4			1	3	16	1	6	12
	1960-61				9	1	3	13	13	6	7	26	2	7	14	7		30	2	2	2				1	7		2	2
	1920-61				69	2	27	98	122	15	37	174	10	18	51	28	11	118	8	8	6			3	4	29	1	13	17
WEST ASIA	1920-29				7		1	8	9	1	1	11	1		3	1	1	6		1					1	2		9	
	1930-39				13		4	17	21	5	3	29			9	5	1	15	2	4				1		7		12	
	1940-49				31		5	36	54	10	14	78	21	8	20	21	17	87	19	9	4			1		33	1	6	3
	1950-59		2		97	2	24	125	252	24	73	349	61	79	154	97	104	495	73	38	25	1	1	6	34	178		33	34
	1960-61				37	3	10	50	87	8	49	144	36	32	79	44	39	230	14	13	16		2	3	12	60		8	6
	1920-61		2		185	5	44	236	423	48	140	611	119	119	265	168	162	833	108	65	45	1	3	11	47	280	1	68	43
EAST ASIA	1920-29				13		7	20	28		4	32	3	3	21	3	7	37	1	3	1					5		7	1
	1930-39				28	2	8	38	73	6	16	95	11	2	40	36	9	98	8	13	1					22		15	4
	1940-49				89	2	8	99	73	13	25	111	6	8	53	30	13	110	24	22	9					55		6	5
	1950-59		1		83	9	35	128	175	15	75	265	64	57	195	97	81	494	63	49	41	2		7	9	171	2	25	19
	1960-61		2		25	6	12	45	56	9	39	104	19	20	42	21	22	124	17	11	7			1	2	38		13	5
	1920-61		3		238	19	70	330	405	43	159	607	103	90	351	187	132	863	113	98	59	2		8	11	291	2	66	34
AUST-RAL-ASIA	1920-29				2		3	5	18			18			11	3	7	21	3	1						4		3	1
	1930-39				4		2	6	17	1	2	20	1		4	6	3	14	7	5	1			1		14		1	
	1940-49				6		5	11	12	1	1	14	1		5	11		17	4	6	1				1	12			2
	1950-59				51	1	16	68	71	8	6	85	16	27	27	19	19	108	7	20	7			3	5	42		14	10
	1960-61				8	1	3	12	33	4	5	42	8	14	15	13	12	62	5	9				1	2	17		7	3
	1920-61				71	2	29	102	151	14	14	179	26	41	62	52	41	222	26	41	9			5	8	89		25	16
TOTAL FOR'N.	1920-29				126		44	170	167	28	34	229	8	4	155	21	46	234	45	12	2			2	2	63		47	19
	1930-39				210	9	62	281	317	60	66	443	27	7	176	89	93	392	71	47	6			5	4	133		68	13
	1940-49			1	326	17	76	420	399	79	83	561	61	43	223	99	126	552	124	75	19			4	3	225	1	48	28
	1950-59		4	1	792	46	209	1052	1218	218	348	1784	262	341	836	445	494	2378	361	237	120	3	1	26	83	831	10	170	142
	1960-61		2		178	17	61	258	344	64	143	551	96	126	246	144	131	743	71	53	35		3	7	24	193	1	50	29
	1920-61		6	2	1632	89	452	2181	2445	449	674	3568	454	521	1636	798	890	4299	672	424	182	3	4	44	116	1445	12	383	231
UNK.	1920-29				20		3	23	153	3	11	167	7	1	40	6	7	61	2	2						4		45	16
	1930-39				40		4	44	122	2	3	127	11		61	4	4	80	1					6	1	8		78	40
	1940-49				57			57	5			5					15	15											2
	1950-59				3			3	59			59				2	2	4											1
	1960-61								105			105			3			3											
	1920-61				120		7	127	444	5	14	463	18	1	104	12	28	163	3	2				6	1	12		123	59
GRAND TOTAL	1920-29				1189	57	607	1853	2462	274	542	3278	362	108	1759	392	746	3367	359	504	104	2		43	47	1059		709	381
	1930-39			1	2297	158	1198	3654	4866	587	1512	6965	1195	343	2866	1034	1352	6790	774	1260	415	31		159	123	2762		976	639
	1940-49			7	2706	198	1047	3958	5603	679	1812	8094	1500	891	3409	1081	1587	8468	1020	1300	463	10		195	118	3106	17	703	851
	1950-59		15	19	6330	380	2202	8946	13518	1686	4794	19998	3421	3694	7396	4023	3570	22104	2201	2780	1582	63	6	502	744	7878	192	1581	1568
	1960-61	3	18	4	1566	102	543	2236	3033	462	1258	4753	817	1007	1665	1168	814	5471	477	620	362	18	15	144	212	1848	39	390	299
	1920-61	3	33	31	14088	895	5597	20647	29482	3688	9918	43088	7295	6043	17095	7698	8069	46200	4831	6464	2926	124	21	1043	1244	16653	248	4359	3738

Appendix 9

MIGRATION, STATE-BY-STATE, FROM BACCALAUREATE TO DOCTORATE, BY DECADE OF DOCTORATE

Va	W Va	N C	S C	Ga	Fla	So. Atl.	Ky	Tenn	Ala	Miss	East So.C	Ark	La	Okla	Tex	West So.C	Mont	Wyo	Colo	N M	Ariz	Utah	Mtn.	Wash	Oreg	Cal	Aka	Hwai	Pac.	GRAND TOTAL
						4																				2			2	27
1						4																		3		10			13	86
					1	5									1	1								2		18			20	121
2		3		1	1	27	1				1		1	1	8	10			1				1	3		26			29	339
		4		1	5	15							2			2			1		1		2	2	2	9			13	97
3		7		2	7	55	1				1		3	1	9	13			2		1		3	10	2	65			77	670
						2													1				1			9			9	56
2						12									1	1			1				1			9			9	86
						4																			1	12			13	106
		2		1	2	29		1	1		2	1	4	1	4	10			4				4	5	1	52			58	417
		1				3							3		2	5			1				1			16			16	86
2		3		1	2	50		1	1		2	1	7	1	7	16			7				7	5	2	98			105	751
1						6		1			1								1				1			3			3	39
						1													2				2			3			3	52
						2																				6			6	54
1		2			1	23		1			1		2		2	4			4			1	5		1	27			28	284
		1			2	7							1		2	3			2				2			14			14	102
2		3			3	39		2			2		3		4	7			9			1	10		1	53			54	531
						9																				3			3	39
		1				13							1			1			1				1	1		4			5	88
	2	2			1	15							1			1					2	1	3	5		22			27	280
7	1	42		4	13	134	1	6	2	3	12	2	26	9	43	80		2	19	1	1	11	34	27	13	129		1	170	1577
1	1	10		7	12	45	1	3		1	5		16	7	7	30	2	1	5		3	5	16	13	10	64			87	667
8	4	55		11	26	216	2	9	2	4	17	2	44	16	50	112	2	3	25	1	6	17	54	46	23	222		1	292	2651
						8																				1			1	103
1	1	1				22		2			2								1				1	2		26			28	306
		1				12							3			3			4				4	5	7	36			48	442
6	2	14		7	8	83	4	5			9		19	4	20	43		3	17			11	31	43	14	120	1		178	1402
4	1	6	1	3	9	42	2	2	1	1	6		5	4	14	23	1		3		1	3	8	6	7	39	1		53	443
11	4	22	1	10	17	167	6	9	1	1	17		27	8	34	69	1	3	25		1	14	44	56	28	222	2		308	2696
						4																				4			4	56
						1									1	1			1				1			9			9	66
		2				4	1				1										1	1	2	1		15			16	77
		10			3	37	1	3			4		3	1	3	7			6		1		7	2	6	48		1	57	415
1		4			3	18	3	1	1		5		2	2	1	5			3			2	5	1		25			26	192
1		16			6	64	5	4	1		10		5	3	5	13			10		2	3	15	4	6	101		1	112	806
1						67		1			1		1			1			2				2	1		62			63	830
7	2	3				93		3			3		2		2	4			7		1		8	14		133		1	148	1505
5	2	15			3	102	1				1		5	1	6	12		1	8		4	2	15	29	14	220			263	2151
30	4	123		14	43	536	13	23	3	5	44	3	73	23	116	215		6	69	4	3	37	119	175	96	769	1	2	1043	8002
12	2	39	2	13	39	187	8	9	2	2	21		34	17	35	86	4	2	18		6	16	46	36	33	250	1		320	2405
55	10	180	2	27	85	985	22	36	5	7	70	3	115	41	159	318	4	9	104	4	14	55	190	255	143	1434	2	3	1837	14893
1		1				63		4			4								2				2			14			14	338
1	1	1				121		2			2								1				1			6			6	389
						2																								79
						1																								67
																														108
2	1	2				187		6			6								3				3			20			20	981
69		79	10			1248		86			86		8	1	46	55			28		3		31	64	3	845			912	11889
217	34	444	6		28	2344	43	282			325		56	50	297	403			134		14		148	262	42	1889		2	2195	25586
235	26	604	1	9	41	2487	56	242			298		162	66	495	723		9	255	6	24	20	314	284	108	2715			3107	30555
484	81	1719	39	236	832	6732	308	998	145	43	1494	90	672	622	2143	3527	19	111	1247	108	77	481	2043	1237	697	8139	4	15	10092	82814
146	10	441	20	96	326	1767	85	241	96	18	440	45	207	222	543	1017	18	28	372	37	65	139	659	335	203	2060	4	10	2612	20803
1151	151	3287	76	341	1227	14578	492	1849	241	61	2643	135	1105	961	3524	5725	37	148	2036	151	183	640	3195	2182	1053	15648	8	27	18918	171647

Appendix 10

TYPES OF INSTITUTIONS (1962 CLASSIFICATION) AS ORIGINS OF DOCTORATES, BY DECADE

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL, PHYSICAL SCIENCES	Biological Sciences	TOTAL, NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL, SOC SCI-ARTS-EDUC	GRAND TOTAL, ALL FIELDS
LIBERAL ARTS & GENERAL	1920-29	17	35	87	10		149	102	251	46	137	197	55	435	686
	1930-39	42	71	186	18	15	332	206	538	57	234	331	122	744	1282
	1940-49	47	77	216	13	17	370	177	547	71	243	308	144	766	1313
	1950-59	94	188	393	53	36	764	333	1097	212	503	611	325	1651	2748
	1960-61	15	52	94	13	16	190	87	277	60	130	166	68	424	701
TOTAL,	1920-61	215	423	976	107	84	1805	905	2710	446	1247	1613	714	4020	6730
LIBERAL ARTS & GENERAL, & TERMINAL-OCCUPATIONAL	1920-29										2			2	2
	1930-39			1			1	2	3		1	1		2	5
	1940-49			2			2	4	6		1		4	5	11
	1950-59			2			2	10	12		4	8	11	23	35
	1960-61							1	1		1	1	6	8	9
TOTAL,	1920-61			5			5	17	22		9	10	21	40	62
TEACHER PREPARATORY	1920-29			1			1	3	4		4	5	7	16	20
	1930-39	2	1	7		1	11	24	35	1	22	14	40	77	112
	1940-49	1		17	1	1	20	44	64	15	37	23	220	295	359
	1950-59	22	11	46	2	2	83	91	174	70	149	117	1204	1540	1714
	1960-61	4	3	10		2	19	14	33	12	30	41	305	388	421
TOTAL,	1920-61	29	15	81	3	6	134	176	310	98	242	200	1776	2316	2626
LIBERAL ARTS & GENERAL, & TEACHER PREPARATORY	1920-29	54	93	314	23	13	497	326	823	103	313	358	247	1021	1844
	1930-39	135	225	731	41	32	1164	680	1844	197	626	819	684	2326	4170
	1940-49	115	210	967	56	31	1379	702	2081	185	642	923	1022	2772	4853
	1950-59	236	457	1672	153	94	2612	1379	3991	802	1440	1820	2908	6970	10961
	1960-61	75	104	368	44	30	621	359	980	226	316	486	770	1798	2778
TOTAL,	1920-61	615	1089	4052	317	200	6273	3446	9719	1513	3337	4406	5631	14887	24606
LIBERAL ARTS & GENERAL, TERMINAL OCCUPATIONAL, & TEACHER PREPARATORY	1920-29	7	17	23	1		48	16	64	19	21	29	45	114	178
	1930-39	14	17	71	3	2	107	79	186	29	88	80	162	359	545
	1940-49	35	43	150	8	5	241	142	383	61	122	138	332	653	1036
	1950-59	96	157	379	21	18	671	461	1132	301	359	392	1039	2091	3223
	1960-61	36	31	104	6	8	185	122	307	95	74	137	270	576	883
TOTAL,	1920-61	188	265	727	39	33	1252	820	2072	505	664	776	1848	3793	5865
PROFESSIONAL & TECHNICAL ONLY	1920-29	5	23	56	3	22	109	36	145	22	45	58	56	181	326
	1930-39	28	89	132	42	62	353	83	436	37	74	112	151	374	810
	1940-49	25	80	190	32	153	480	88	568	26	96	140	161	423	991
	1950-59	103	349	374	107	498	1431	260	1691	111	246	316	292	965	2656
	1960-61	43	67	101	31	160	402	63	465	34	54	66	44	198	663
TOTAL,	1920-61	204	608	853	215	895	2775	530	3305	230	515	692	704	2141	5446
PROFESSIONAL & TECHNICAL, & TEACHER PREPARATORY	1920-29	6	10	49	3	3	71	81	152	10	18	23	13	64	216
	1930-39	15	34	134	4	34	221	214	435	23	60	38	62	183	618
	1940-49	20	53	183	12	124	392	234	626	22	76	49	84	231	857
	1950-59	86	202	306	32	587	1213	651	1864	109	224	196	265	794	2658
	1960-61	20	51	67	11	149	298	146	444	20	50	53	68	191	635
TOTAL,	1920-61	147	350	739	62	897	2195	1326	3521	184	428	359	492	1463	4984
PROFESSIONAL & TECHNICAL, & TERMINAL-OCCUPATIONAL	1920-29	2	1	4			7	1	8				1	1	9
	1930-39		1	7	1	6	15		15		1	2		3	18
	1940-49	1	2	10	1	10	24	2	26		2	1	1	4	30
	1950-59	4	24	29		68	125	4	129	3	7	4	11	25	154
	1960-61	3	6	5	1	18	33	2	35		2	4		6	41
TOTAL,	1920-61	10	34	55	3	102	204	9	213	3	12	11	13	39	252
LIBERAL ARTS & GENERAL WITH ONE OR TWO PROFESSIONAL SCHOOLS	1920-29	26	49	132	19	5	231	116	347	62	145	198	70	475	822
	1930-39	60	100	230	28	29	447	257	704	85	276	381	236	978	1682
	1940-49	47	111	377	29	57	621	233	854	102	274	384	353	1113	1967
	1950-59	143	294	669	63	191	1360	663	2023	481	657	840	920	2898	4921
	1960-61	29	67	150	18	65	329	185	514	117	186	264	232	799	1313
TOTAL,	1920-61	305	621	1558	157	347	2988	1454	4442	847	1538	2067	1811	6263	10705

Appendix 10

TYPES OF INSTITUTIONS (1962 CLASSIFICATION) AS ORIGINS OF DOCTORATES, BY DECADE

		Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL, PHYSICAL SCIENCES	Biological Sciences	TOTAL, NATURAL SCIENCES	Psychology	Social Sciences	Arts & Professions	Education	TOTAL, SOC SCI-ARTS-EDUC	GRAND TOTAL, ALL FIELDS
LIBERAL ARTS & GENERAL WITH THREE OR MORE PROFESSIONAL SCHOOLS	1920-29	193	346	1154	216	152	2061	1397	3458	332	1021	1126	546	3025	6483
	1930-39	429	707	2268	398	512	4314	3089	7403	655	2209	2553	1455	6872	14275
	1940-49	453	785	2993	342	764	5337	3640	8977	700	2412	2532	2153	7797	16774
	1950-59	1263	2825	5564	964	3253	13869	8891	22760	4076	6364	5844	6289	22573	45333
	1960-61	319	646	1066	305	1014	3350	1958	5308	976	1478	1517	1472	5443	10751
TOTAL,	1920-61	2657	5309	13045	2225	5695	28931	18975	47906	6739	13484	13572	11915	45710	93616
FOREIGN & UNKNOWN	1920-29	41	77	104	57	32	311	291	602	49	224	322	106	701	1303
	1930-39	55	91	196	94	113	549	456	1005	47	321	511	185	1064	2069
	1940-49	91	122	221	72	250	756	614	1370	67	342	327	258	994	2364
	1950-59	277	465	806	313	1186	3047	2169	5216	260	1204	1025	706	3195	8411
	1960-61	108	149	279	79	369	984	641	1625	92	405	303	183	983	2608
TOTAL,	1920-61	572	904	1606	615	1950	5647	4171	9818	515	2496	2488	1438	6937	16755
GRAND TOTAL	1920-29	351	651	1924	332	227	3485	2369	5854	643	1930	2316	1146	6035	11889
	1930-39	780	1336	3963	629	806	7514	5090	12604	1131	3912	4842	3097	12982	25586
	1940-49	835	1483	5326	566	1412	9622	5880	15502	1249	4247	4825	4732	15053	30555
	1950-59	2324	4972	10240	1708	5933	25177	14912	40089	6425	11157	11173	13970	42725	82814
	1960-61	652	1176	2244	508	1831	6411	3578	9989	1632	2726	3038	3418	10814	20803
TOTAL,	1920-61	4942	9618	23697	3743	10209	52209	31829	84038	11080	23972	26194	26363	87609	171647

Appendix 11

FOREIGN COUNTRIES OF BACCALAUREATE ORIGIN OF U.S. DOCTORATES IN FIVE MAJOR FIELDS, BY DECADE

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
SOUTH AFRICA	1920-29	6	10	7		4	27
	1930-39	6	10	1	1	5	23
	1940-49	11	3	7	2	4	27
	1950-59	31	28	10	3	2	74
	1960-61	6	8	3			17
	TOTAL, 1920-61	60	59	28	6	15	168
ALGERIA	1920-29						
	1930-39						
	1940-49		1		1		2
	1950-59	1			1		2
	1960-61						
	TOTAL, 1920-61	1	1		2		4
ANGLO-EGYPTIAN SUDAN	1920-29						
	1930-39						
	1940-49						
	1950-59		2				2
	1960-61		1				1
	TOTAL, 1920-61		3				3
BRITISH WEST AFRICA	1920-29						
	1930-39						
	1940-49						
	1950-59			2			2
	1960-61						
	TOTAL, 1920-61			2			2
EGYPT	1920-29						
	1930-39		1	1			2
	1940-49	21	24	4	2	7	58
	1950-59	108	166	67	29	40	410
	1960-61	18	20	17	16	17	88
	TOTAL, 1920-61	147	211	89	47	64	558
LIBERIA	1920-29						
	1930-39						
	1940-49						
	1950-59					1	1
	1960-61						
	TOTAL, 1920-61					1	1
ETHIOPIA	1920-29						
	1930-39						
	1940-49						
	1950-59		1			2	3
	1960-61					1	1
	TOTAL, 1920-61		1			3	4
AFRICA UNKNOWN	1920-29				1		1
	1930-39						
	1940-49						
	1950-59		2			2	4
	1960-61						
	TOTAL, 1920-61		2		1	2	5
CANADA	1920-29	132	85	70	75	17	379
	1930-39	216	173	116	116	29	650
	1940-49	274	242	116	109	82	823
	1950-59	819	696	373	285	150	2323
	1960-61	133	133	80	54	36	436
	TOTAL, 1920-61	1574	1329	755	639	314	4611

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
COSTA RICA	1920-29						
	1930-39						
	1940-49	1	1		1		3
	1950-59		5	1	1	1	8
	1960-61	1	1				2
	TOTAL, 1920-61	2	7	1	2	1	13
CUBA	1920-29		1				1
	1930-39						
	1940-49	1	1				2
	1950-59	6	1		4		11
	1960-61			1	2		3
	TOTAL, 1920-61	7	3	1	6		17
DOMINICAN REPUBLIC	1920-29						
	1930-39						
	1940-49						
	1950-59		1				1
	1960-61						
	TOTAL, 1920-61		1				1
EL SALVADOR	1920-29		2				2
	1930-39						
	1940-49		1				1
	1950-59						
	1960-61						
	TOTAL, 1920-61		3				3
GUATEMALA	1920-29				1		1
	1930-39				1		1
	1940-49			1			1
	1950-59		3	1			4
	1960-61						
	TOTAL, 1920-61		3	2	2		7
HAITI	1920-29						
	1930-39						
	1940-49			1			1
	1950-59		1				1
	1960-61		2	1			3
	TOTAL, 1920-61		3	2			5
NICARAGUA	1920-29		1				1
	1930-39						
	1940-49			1			1
	1950-59	1					1
	1960-61						
	TOTAL, 1920-61	1	1	1			3
PANAMA	1920-29						
	1930-39						
	1940-49				1	1	2
	1950-59			1			1
	1960-61						
	TOTAL, 1920-61			1	1	1	3
WEST INDIES	1920-29						
	1930-39				1		1
	1940-49		1				1
	1950-59			1			1
	1960-61	1		1			2
	TOTAL, 1920-61	1	1	2	1		5

Appendix 11

FOREIGN COUNTRIES OF BACCALAUREATE ORIGIN OF U.S. DOCTORATES IN FIVE MAJOR FIELDS, BY DECADE

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
MEXICO	1920-29			2	1		3
	1930-39						
	1940-49	7	5				12
	1950-59	16	19	6	8	3	52
	1960-61	8	10	1			19
	TOTAL, 1920-61	31	34	9	9	3	86
NORTH & CENTRAL AMERICA-UNKNOWN	1920-29				1		1
	1930-39		1		1		2
	1940-49						
	1950-59						
	1960-61						
	TOTAL, 1920-61		1		2		3
ARGENTINA	1920-29				1		1
	1930-39				1		1
	1940-49	1		3			4
	1950-59	10	6	4	4		24
	1960-61	6	1	1	3		11
	TOTAL, 1920-61	17	7	8	9		41
BOLIVIA	1920-29						
	1930-39						
	1940-49						
	1950-59			1			1
	1960-61						
	TOTAL, 1920-61			1			1
BRAZIL	1920-29	1	3				4
	1930-39		1				1
	1940-49	1	5	2	1		9
	1950-59	21	12	7	1		41
	1960-61	8	3		1	1	13
	TOTAL, 1920-61	31	24	9	3	1	68
CHILE	1920-29		1		1		2
	1930-39				2		2
	1940-49	2	3		3		8
	1950-59	3	10	2	3	1	19
	1960-61	4	5	2	2	1	14
	TOTAL, 1920-61	9	19	4	11	2	45
COLOMBIA	1920-29		1				1
	1930-39	1					1
	1940-49	3			4	1	8
	1950-59	3	5	4	2		14
	1960-61	1	2	1			4
	TOTAL, 1920-61	8	8	5	6	1	28
ECUADOR	1920-29						
	1930-39						
	1940-49		1				1
	1950-59		1	1	1		3
	1960-61	1					1
	TOTAL, 1920-61	1	2	1	1		5
PARAGUAY	1920-29						
	1930-39		1				1
	1940-49						
	1950-59				1	1	2
	1960-61						
	TOTAL, 1920-61		1		1	1	3
PERU	1920-29						
	1930-39						
	1940-49		2				2
	1950-59	3	10	2	1	2	18
	1960-61	2	2	1			5
	TOTAL, 1920-61	5	14	3	1	2	25
URUGUAY	1920-29						
	1930-39						
	1940-49		1				1
	1950-59	1				1	2
	1960-61	1					1
	TOTAL, 1920-61	2	1			1	4
VENEZUELA	1920-29						
	1930-39	1	2				3
	1940-49		2				2
	1950-59	2	2				4
	1960-61						
	TOTAL, 1920-61	3	6				9
ENGLAND	1920-29	10	7	14	11	6	48
	1930-39	28	8	24	23	2	85
	1940-49	19	6	16	16	9	66
	1950-59	111	30	90	59	9	299
	1960-61	51	19	32	23	3	128
	TOTAL, 1920-61	219	70	176	132	29	626
FINLAND	1920-29						
	1930-39				1		1
	1940-49	1			2		3
	1950-59	15	7	1	6	1	30
	1960-61	2					2
	TOTAL, 1920-61	18	7	1	9	1	36
ICELAND	1920-29						
	1930-39						
	1940-49						
	1950-59	1					1
	1960-61						
	TOTAL, 1920-61	1					1
IRISH REPUBLIC	1920-29	1	1			1	3
	1930-39	1		3	4	3	11
	1940-49	3		1	1		5
	1950-59	11	3	2	1		17
	1960-61	3	4	3	3	1	14
	TOTAL, 1920-61	19	8	9	9	5	50
NORTHERN IRELAND	1920-29				1	1	2
	1930-39	1					1
	1940-49						
	1950-59	5	2				7
	1960-61	1	2				3
	TOTAL, 1920-61	7	4		1	1	13
NORWAY	1920-29	3					3
	1930-39	4					4
	1940-49	4	2				6
	1950-59	14	17	9	6	2	48
	1960-61	2	3	1	3		9
	TOTAL, 1920-61	27	22	10	9	2	70

Appendix 11

FOREIGN COUNTRIES OF BACCALAUREATE ORIGIN OF U.S. DOCTORATES IN FIVE MAJOR FIELDS, BY DECADE

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS			Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
SCOTLAND	1920-29	4	5	1	1		11	CENTRAL EUROPE	1920-29				1		1
	1930-39	6	4	2	1		13	UNKNOWN	1930-39						
	1940-49		6	2	1	1	10		1940-49						
	1950-59	18	11	11	5		45		1950-59	5	1	1	6	1	14
	1960-61	4	5	7	3		19		1960-61						
TOTAL,	1920-61	32	31	23	11	1	98	TOTAL,	1920-61	5	1	1	7	1	15
SWEDEN	1920-29	4	4	1			9	BELGIUM	1920-29	7	1		3		11
	1930-39	4	2	1			7		1930-39	10	1	1	2		14
	1940-49	2		1	1		4		1940-49	3	1	4	3		11
	1950-59	26	8	3	3	2	42		1950-59	16	3	4	11		34
	1960-61	4	2	4	2		12		1960-61	4		1	3		8
TOTAL,	1920-61	40	16	10	6	2	74	TOTAL,	1920-61	40	6	10	22		78
WALES	1920-29	1					1	FRANCE	1920-29	4	1	3	14		22
	1930-39	1			2		3		1930-39	6		6	26	2	40
	1940-49				1		1		1940-49	11	3	6	21	2	43
	1950-59	7	4	3	2		16		1950-59	67	12	21	52		152
	1960-61				1		1		1960-61	15	1	3	13	1	33
TOTAL,	1920-61	9	4	3	6		22	TOTAL,	1920-61	103	17	39	128	5	292
DENMARK	1920-29	3	2		1		6	NETHERLANDS	1920-29	5	2	2	1		10
	1930-39	2	5	1			8		1930-39	4	1		3		8
	1940-49	3	3	1			7		1940-49	7	3		3	1	14
	1950-59	6	8	6	3	1	24		1950-59	38	24	12	4	3	81
	1960-61	3	3	1	2		9		1960-61	6	2	5	2		15
TOTAL,	1920-61	17	21	9	6	1	54	TOTAL,	1920-61	60	32	19	13	4	128
NORTHERN EUROPE	1920-29	2			1		3	PORTUGAL	1920-29						
UNKNOWN	1930-39	1					1		1930-39		1				1
	1940-49				1		1		1940-49		1				1
	1950-59	5	1	2	2		10		1950-59	1	5	1	1		8
	1960-61								1960-61		1				1
TOTAL,	1920-61	8	1	2	4		15	TOTAL,	1920-61	1	8	1	1		11
AUSTRIA	1920-29	1					1	SPAIN	1920-29		1		1		2
	1930-39		3	5	6	1	15		1930-39	1			2		3
	1940-49	8	6	12	8	1	35		1940-49	2	1		5		8
	1950-59	20	10	24	16	2	72		1950-59	9	4	4	14	2	33
	1960-61	2	2	3	3	2	12		1960-61	7	1	1	4		13
TOTAL,	1920-61	31	21	44	33	6	135	TOTAL,	1920-61	19	7	5	26	2	59
GERMANY	1920-29	3	3	5	6	1	18	SWITZERLAND	1920-29	1	1	1	7		10
	1930-39	9	12	10	26	1	58		1930-39	7	2	4	7		20
	1940-49	25	5	12	23	4	69		1940-49	10	2	5	11	1	29
	1950-59	57	37	42	48	6	190		1950-59	43	21	15	9		88
	1960-61	19	15	15	16	1	66		1960-61	8	2	2	3		15
TOTAL,	1920-61	113	72	84	119	13	401	TOTAL,	1920-61	69	28	27	37	1	162
ITALY	1920-29		1	1	4	1	7	WESTERN EUROPE	1920-29						
	1930-39	1	2	4	4	1	12	UNKNOWN	1930-39						
	1940-49	2	2	6	6		16		1940-49						
	1950-59	21	7	8	25	2	63		1950-59	5	5	6	5		21
	1960-61	4	5	1	9		19		1960-61		1				1
TOTAL,	1920-61	28	17	20	48	4	117	TOTAL,	1920-61	5	6	6	5		22
MEDITERRANEAN	1920-29							BULGARIA	1920-29			1	1		2
	1930-39			1			1		1930-39						
	1940-49				1		1		1940-49			1			1
	1950-59								1950-59						
	1960-61								1960-61			1			1
TOTAL,	1920-61			1	1		2	TOTAL,	1920-61			3	1		4

Appendix 11

FOREIGN COUNTRIES OF BACCALAUREATE ORIGIN OF U.S. DOCTORATES IN FIVE MAJOR FIELDS, BY DECADE

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS			Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
CZECHOSLOVAKIA	1920-29	2			1		3	INDIA	1920-29	6	11	4	4	1	26
	1930-39	4	8			1	13		1930-39	5	18	9	8	10	50
	1940-49	2	2	5	1		10		1940-49	66	88	15	6	13	188
	1950-59	8	9	15	9		41		1950-59	358	354	133	54	68	967
	1960-61	1	2	6	3		12		1960-61	201	148	58	12	15	434
TOTAL,	1920-61	17	21	26	14	1	79	TOTAL,	1920-61	636	619	219	84	107	1665
GREECE	1920-29				1		1	IRAN	1920-29						
	1930-39	1				1	2		1930-39			1	1	3	5
	1940-49		1	1		1	3		1940-49	2				1	3
	1950-59	32	25	13	14	7	91		1950-59	21	7	24	5	6	63
	1960-61	15	11	3	3	1	33		1960-61	7	5	9	2	2	25
TOTAL,	1920-61	48	37	17	18	10	130	TOTAL,	1920-61	30	12	34	8	12	96
HUNGARY	1920-29			1	2		3	IRAQ	1920-29						
	1930-39	3	1	1	2	1	8		1930-39						
	1940-49	6	3	2	1	2	14		1940-49					1	1
	1950-59	11	3	12	6	2	34		1950-59	16	18	21	6	12	73
	1960-61	12	8	4	2	2	28		1960-61	9	11	7		3	30
TOTAL,	1920-61	32	15	20	13	7	87	TOTAL,	1920-61	25	29	28	6	16	104
POLAND	1920-29	1			1		2	ISRAEL	1920-29				1		1
	1930-39	4	1		5	1	11		1930-39						
	1940-49	1	3	3	5	2	14		1940-49	2	3	1	1	1	8
	1950-59	6	4	11	9	3	33		1950-59	55	12	25	11	10	113
	1960-61	4	2	3	2		11		1960-61	33	3	17	7	1	61
TOTAL,	1920-61	16	10	17	22	6	71	TOTAL,	1920-61	90	18	43	20	12	183
RUMANIA	1920-29							LEBANON	1920-29	1			1		2
	1930-39	1	1		1		3		1930-39	1	1	4	3	1	10
	1940-49	1					1		1940-49	5	2	5	3	2	17
	1950-59	5	1	4	3		13		1950-59	39	19	34	12	13	117
	1960-61								1960-61	14	13	6	3	4	40
TOTAL,	1920-61	7	2	4	4		17	TOTAL,	1920-61	60	35	49	22	20	186
USSR	1920-29	9	3	4	6	2	24	TURKEY	1920-29	4	3	2			9
	1930-39	7	2	3	2	1	15		1930-39	4	3	3	6	2	18
	1940-49	5	1	4	1		11		1940-49	11	5	8			24
	1950-59	8	7	15	15	1	46		1950-59	33	7	12	5	3	60
	1960-61	1		1	3		5		1960-61	10	4	4	5	4	27
TOTAL,	1920-61	30	13	27	27	4	101	TOTAL,	1920-61	62	22	29	16	9	138
YUGOSLAVIA	1920-29				1		1	SYRIA	1920-29					1	1
	1930-39								1930-39		1		1	1	3
	1940-49								1940-49					1	1
	1950-59	3		7	4		14		1950-59	1	1	8	1		11
	1960-61	5	1	2	3		11		1960-61			2			2
TOTAL,	1920-61	8	1	9	8		26	TOTAL,	1920-61	1	2	10	2	3	18
EASTERN EUROPE UNKNOWN	1920-29		2		1		3	PAKISTAN	1920-29						
	1930-39								1930-39		2				2
	1940-49								1940-49	12	22	2	1	1	38
	1950-59	6	2		4		12		1950-59	30	55	22	8	11	126
	1960-61			1			1		1960-61	9	12	18	3	3	45
TOTAL,	1920-61	6	4	1	5		16	TOTAL,	1920-61	51	91	42	12	15	211
AFGHANISTAN	1920-29							JORDAN	1920-29						
	1930-39								1930-39						
	1940-49								1940-49						
	1950-59		1	1			2		1950-59						
	1960-61		1			1	2		1960-61		1				1
TOTAL,	1920-61		2	1		1	4	TOTAL,	1920-61		1				1

Appendix 11

FOREIGN COUNTRIES OF BACCALAUREATE ORIGIN OF U.S. DOCTORATES IN FIVE MAJOR FIELDS, BY DECADE

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
WESTERN ASIA UNKNOWN	1920-29						
	1930-39						
	1940-49						
	1950-59	9	17	10	5	4	45
	1960-61						
	TOTAL, 1920-61	9	17	10	5	4	45
BURMA	1920-29						
	1930-39						
	1940-49					1	1
	1950-59	6	8	9	2	5	30
	1960-61	2	1	3			6
	TOTAL, 1920-61	8	9	12	2	6	37
CEYLON	1920-29						
	1930-39						
	1940-49		1				1
	1950-59	3	3	5		1	12
	1960-61	4	4	2		1	11
	TOTAL, 1920-61	7	8	7		2	24
CHINA	1920-29	24	9	22	15	7	77
	1930-39	104	68	62	39	12	285
	1940-49	181	104	83	27	29	424
	1950-59	573	205	133	58	50	1019
	1960-61	151	38	25	4	3	221
	TOTAL, 1920-61	1033	424	325	143	101	2026
VIET NAM	1920-29						
	1930-39						
	1940-49						
	1950-59	1		1			2
	1960-61				1		1
	TOTAL, 1920-61	1		1	1		3
JAPAN	1920-29	4	5	7	2	1	19
	1930-39	2	6	3	1	2	14
	1940-49			1	1	1	3
	1950-59	102	32	27	17	7	185
	1960-61	54	17	13	9	4	97
	TOTAL, 1920-61	162	60	51	30	15	318
KOREA	1920-29				1		1
	1930-39		1		2		3
	1940-49				1		1
	1950-59	26	24	7	5	7	69
	1960-61	35	8	17	7	6	73
	TOTAL, 1920-61	61	33	24	16	13	147
THAILAND	1920-29						
	1930-39		1				1
	1940-49	2	4	2		2	10
	1950-59	12	21	6	5	18	62
	1960-61	4	11	7	1	6	29
	TOTAL, 1920-61	18	37	15	6	26	102
HONG KONG	1920-29		1	2			3
	1930-39		1			2	3
	1940-49	1		1			2
	1950-59	2					2
	1960-61	2				1	3
	TOTAL, 1920-61	5	2	3		3	13

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
EASTERN ASIA UNKNOWN	1920-29			2	1		3
	1930-39						
	1940-49						
	1950-59	7	2	6	5	1	21
	1960-61	1		1			2
	TOTAL, 1920-61	8	2	9	6	1	26
AUSTRALIA	1920-29		5	1		3	9
	1930-39	2	7	4	2	5	20
	1940-49	7	12	6	4	6	35
	1950-59	49	32	26	19	18	144
	1960-61	12	29	15	6	7	69
	TOTAL, 1920-61	70	85	52	31	39	277
INDONESIA	1920-29						
	1930-39						
	1940-49						
	1950-59			1	1	1	3
	1960-61	6	4	3		1	14
	TOTAL, 1920-61	6	4	4	1	2	17
NEW ZEALAND	1920-29	2				1	3
	1930-39	3	5	4			12
	1940-49	1	4	2	1	2	10
	1950-59	19	26	12	7	4	68
	1960-61	5	7	2		4	18
	TOTAL, 1920-61	30	42	20	8	11	111
PHILIPPINES	1920-29	13	19	8	4		44
	1930-39	3	18	4	5	4	34
	1940-49	8	11	7	4	2	32
	1950-59	28	39	27	23	81	198
	1960-61	18	24	15	9	24	90
	TOTAL, 1920-61	70	111	61	45	111	398
AUSTRALASIA UNKNOWN	1920-29						
	1930-39						
	1940-49						
	1950-59					2	2
	1960-61			1			1
	TOTAL, 1920-61			1		2	3

Appendix 11

FOREIGN COUNTRIES OF BACCALAUREATE ORIGIN OF U.S. DOCTORATES IN FIVE MAJOR FIELDS, BY DECADE

		Physical Sciences	Biological Sciences	Social Sciences	Arts & Professions	Education	TOTAL ALL FIELDS
TOTAL, AFRICA	1920-29	6	10	7	1	4	28
	1930-39	6	11	2	1	5	25
	1940-49	32	28	11	5	11	87
	1950-59	140	199	79	33	47	498
	1960-61	24	29	20	16	18	107
TOTAL,	1920-61	208	277	119	56	85	745
TOTAL, NORTH & CENTRAL AMERICA	1920-29	132	89	72	78	17	388
	1930-39	216	174	116	119	29	654
	1940-49	283	251	119	111	83	847
	1950-59	842	726	383	298	154	2403
	1960-61	143	146	84	56	36	465
TOTAL,	1920-61	1616	1386	774	662	319	4757
TOTAL, SOUTH AMERICA	1920-29	1	5		2		8
	1930-39	2	4		3		9
	1940-49	7	14	5	8	1	35
	1950-59	43	46	21	13	5	128
	1960-61	23	13	5	6	2	49
TOTAL,	1920-61	76	82	31	32	8	229
TOTAL, NORTHERN EUROPE	1920-29	28	19	16	15	8	86
	1930-39	48	19	31	31	5	134
	1940-49	32	17	21	23	10	103
	1950-59	219	91	127	87	15	539
	1960-61	70	38	48	37	4	197
TOTAL,	1920-61	397	184	243	193	42	1059
TOTAL, CENTRAL EUROPE	1920-29	4	4	6	11	2	27
	1930-39	10	17	20	36	3	86
	1940-49	35	13	30	38	5	121
	1950-59	103	55	75	95	11	339
	1960-61	25	22	19	28	3	97
TOTAL,	1920-61	177	111	150	208	24	670
TOTAL, WESTERN EUROPE	1920-29	17	6	6	26		55
	1930-39	28	5	11	40	2	86
	1940-49	33	11	15	43	4	106
	1950-59	179	74	63	96	5	417
	1960-61	40	8	12	25	1	86
TOTAL,	1920-61	297	104	107	231	12	751
TOTAL, EASTERN EUROPE	1920-29	12	5	6	14	2	39
	1930-39	20	13	4	10	5	52
	1940-49	15	10	16	8	5	54
	1950-59	79	51	77	64	13	284
	1960-61	38	24	21	16	3	102
TOTAL,	1920-61	164	103	124	112	28	531
TOTAL, WESTERN ASIA	1920-29	11	14	6	6	2	39
	1930-39	10	25	17	19	17	88
	1940-49	98	120	31	11	20	280
	1950-59	562	491	290	107	127	1577
	1960-61	283	198	121	32	33	667
TOTAL,	1920-61	964	848	465	175	199	2651
TOTAL, EASTERN ASIA	1920-29	28	15	33	19	8	103
	1930-39	106	77	65	42	16	306
	1940-49	184	109	87	29	33	442
	1950-59	732	295	194	92	89	1402
	1960-61	253	79	68	22	21	443
TOTAL,	1920-61	1303	575	447	204	167	2696
TOTAL, AUSTRAL-ASIA	1920-29	15	24	9	4	4	56
	1930-39	8	30	12	7	9	66
	1940-49	16	27	15	9	10	77
	1950-59	96	97	66	50	106	415
	1960-61	41	64	36	15	36	192
TOTAL,	1920-61	176	242	138	85	165	806
GRAND TOTAL	1920-29	254	191	161	176	47	829
	1930-39	454	375	278	308	91	1506
	1940-49	735	600	350	285	182	2152
	1950-59	2995	2125	1375	935	572	8002
	1960-61	940	621	434	253	157	2405
TOTAL,	1920-61	5378	3912	2598	1958	1049	14895

Appendix 12

FIELD CHANGES FROM BACCALAUREATE TO DOCTORATE DEGREE 1957-1961

DOCTORATE FIELD → ↓ BACCALAUREATE FIELD	Mathematics	Physics	Chemistry	Geo-Sciences	Engineering	TOTAL, PHYSICAL SCIENCES	Agricultural Sciences	Medical Sciences	Anat., Cytol., Embryol.	Physiology & Related	Biochemistry	Botany-Phytopathology	Microbiology	Zoology & Entomology	Biosciences, Misc.	TOTAL, BIO-SCIENCES	TOTAL, NATURAL SCIENCES
MATHEMATICS	1013	147	40	26	66	1292	2	3	0	4	4	5	0	6	19	43	1335
PHYSICS	123	1974	20	74	177	2368	2	5	0	12	6	2	2	1	58	88	2456
CHEMISTRY	15	64	4512	45	125	4761	41	32	9	117	707	16	67	25	34	1048	5809
GEO-SCIENCES	2	3	3	829	10	847	1	0	0	0	0	1	0	1	2	5	352
ENGINEERING	124	294	200	40	3290	3948	9	3	0	8	7	3	7	5	12	54	4002
TOTAL, PHYSICAL SCIENCES	1277	2482	4775	1014	3668	13216	55	43	9	141	724	27	76	38	125	1238	14454
AGRICULTURAL SCIENCES	3	1	40	10	7	61	1217	5	1	204	52	206	39	94	206	2024	2085
MEDICAL SCIENCES	6	4	157	0	2	169	8	287	29	215	66	6	58	19	18	706	875
ANAT, CYTOL, EMBRYOL.	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	3
PHYSIOLOGY AND RELATED	0	0	1	0	0	1	0	3	2	39	10	0	4	1	6	65	66
BIOCHEMISTRY	1	0	12	2	1	16	3	1	2	13	94	3	3	1	3	123	139
BOTANY-PHYTOPATHOLOGY	0	0	4	0	1	5	33	3	0	28	8	340	12	10	55	489	494
MICROBIOLOGY	0	0	6	0	1	7	7	4	3	10	20	7	268	4	4	327	334
ZOOLOGY AND ENTOMOLOGY	2	1	7	7	1	18	32	20	45	142	40	19	80	569	99	1046	1064
BIOSCIENCES, MISC.	2	2	27	11	3	45	47	28	59	247	113	182	294	354	222	1546	1591
TOTAL, BIO-SCIENCES	14	8	254	30	16	322	1347	351	144	898	403	763	758	1052	613	6329	6651
TOTAL, NATURAL SCIENCES	1291	2490	5029	1044	3684	13538	1402	394	153	1039	1127	790	834	1090	738	7567	21105
PSYCHOLOGY	3	1	5	2	2	13	1	4	2	15	4	0	4	4	6	40	53
ANTHROPOLOGY-ARCHEOLOGY	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	3	3
SOCIOLOGY	0	0	0	0	0	0	1	1	1	0	1	0	0	2	0	6	6
ECONOMICS	8	0	5	3	4	20	10	2	0	2	1	1	0	0	3	19	39
HISTORY	1	1	1	4	1	8	2	1	1	2	1	2	3	3	2	17	25
POL. SCI. + PUBL. ADMIN.	2	0	1	1	1	5	0	0	0	1	0	0	0	0	0	1	6
SOCIAL SCIENCES, MISC.	0	0	0	4	0	4	2	3	0	0	0	0	0	2	1	8	12
TOTAL, SOCIAL SCIENCES	14	2	12	14	8	50	16	11	5	20	7	3	7	11	14	94	144
ENGLISH LANGUAGE + LIT.	4	0	2	3	2	11	0	2	0	4	2	2	5	4	2	21	32
FOREIGN LANGUAGE + LIT.	4	4	6	8	2	24	1	0	1	2	0	1	3	1	1	10	34
PHILOSOPHY	12	8	10	3	0	33	0	0	0	3	3	2	2	6	4	20	53
ARTS & PROFESSIONS	27	55	85	26	34	227	13	13	5	34	33	23	30	29	26	206	433
BUSINESS ADMINISTRATION	8	0	0	2	5	15	2	0	1	2	0	1	0	2	0	8	23
RELIGION-THEOLOGY	1	1	3	0	0	5	1	0	0	1	0	2	0	2	2	8	13
PROFESSIONAL, MISC.	2	1	1	2	5	11	1	1	1	11	4	1	2	0	0	21	32
TOTAL, ARTS-PROFESSIONAL	58	69	107	44	48	326	18	16	8	57	42	32	42	44	35	294	620
EDUCATION	37	15	52	7	9	120	68	15	6	34	15	43	9	37	22	249	369
TOTAL, SOC SCI-ARTS-EDUC	109	86	171	65	65	496	102	42	19	111	64	78	58	92	71	637	1133
GRAND TOTAL, ALL FIELDS	1400	2576	5200	1109	3749	14034	1504	436	172	1150	1191	868	892	1182	809	8204	22238
See text for explanation of these terms "Source" Percentages	72.4	76.6	86.8	74.8	87.8	94.2	80.9	65.8	1.7	3.4	7.9	39.2	30.0	48.1	27.4	77.1	94.9
"Destination" Percentages	55.2	76.7	73.7	92.5	77.2	84.3	50.7	29.0	0.0	48.8	61.4	66.8	78.4	49.4	12.0	84.6	91.1

Appendix 12

FIELD CHANGES FROM BACCALAUREATE TO DOCTORATE DEGREE 1957-1961

Psychology	Anthropology-Archeology	Sociology	Economics	History		Social Sciences, Misc.	TOTAL, SOCIAL SCIENCES	English Language & Lit.	Foreign Language & Lit.	Philosophy	Arts & Professions	Business Administration	Religion-Theology	Professional, Misc.	TOTAL, ARTS-PROFESSIONAL	Education	TOTAL, SOC. SCI-ARTS-EDUC.	GRAND TOTAL, ALL FIELDS
63	8	8	41	7	3	7	137	5	8	16	8	4	9	5	55	307	499	1834
22	5	2	5	3	2	1	40	2	0	6	8	6	2	1	25	52	117	2573
50	3	4	12	1	5	3	78	14	9	12	15	3	4	5	62	172	312	6121
2	4	0	5	1	1	8	21	3	0	1	4	2	0	0	10	13	44	896
40	2	9	32	9	25	5	122	7	3	7	4	49	10	2	82	53	257	4259
177	22	23	95	21	36	24	398	31	20	42	39	64	25	13	234	597	1229	15683
3	1	15	166	0	4	8	197	0	0	1	0	6	0	5	12	106	315	2400
35	3	6	2	0	0	0	46	4	2	4	4	4	0	0	18	52	116	991
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
2	1	1	0	0	0	1	5	0	0	0	0	0	1	3	4	5	14	80
4	0	0	0	0	1	0	5	0	1	0	1	0	1	0	3	6	14	153
1	0	0	2	0	0	1	4	0	0	1	0	0	1	0	2	9	15	509
2	0	0	0	0	0	0	2	0	0	0	0	0	0	1	1	5	8	342
24	3	2	2	3	2	2	38	2	2	2	4	0	0	0	10	40	88	1152
64	2	9	3	2	2	3	85	4	2	4	7	0	3	0	20	158	263	1854
135	10	33	175	5	9	15	382	10	7	12	16	10	6	9	70	381	833	7484
312	32	56	270	26	45	39	780	41	27	54	55	74	31	22	304	978	2062	23167
2454	11	51	8	3	9	16	2552	9	5	7	32	10	20	2	85	247	2884	2937
6	145	3	1	2	0	3	160	0	3	0	11	0	1	0	15	4	179	182
104	17	340	7	6	14	52	540	6	4	3	4	5	24	1	47	120	707	713
41	10	46	909	19	58	20	1103	13	3	3	9	84	10	5	127	125	1355	1394
68	19	43	52	1150	119	26	1477	31	35	23	39	20	61	24	233	557	2267	2292
25	5	22	54	61	576	14	757	4	10	10	19	15	12	18	88	119	964	970
65	10	49	32	60	38	180	434	2	3	3	17	3	14	5	47	305	786	798
2763	217	554	1063	1301	814	311	7023	65	63	49	131	137	142	55	642	1477	9142	9286
148	22	27	19	81	41	20	358	1415	92	40	198	10	95	39	1889	585	2832	2864
48	13	8	6	38	26	4	143	56	703	26	96	3	37	17	938	147	1228	1262
80	11	33	15	46	31	7	223	45	31	334	14	4	121	11	560	109	892	945
169	21	29	34	50	45	17	365	60	37	26	879	19	40	14	1075	608	2048	2481
54	1	12	209	23	22	6	327	8	8	5	5	384	3	22	435	221	983	1006
16	2	16	0	23	2	0	59	4	7	13	15	0	146	0	185	66	310	323
20	3	9	35	28	65	11	171	43	11	3	18	12	4	153	244	122	537	569
535	73	134	318	289	232	65	1646	1631	889	447	1225	432	446	256	5326	1858	8830	9450
233	6	41	59	68	29	32	468	49	33	6	121	24	24	26	283	3392	4143	4512
3531	296	729	1440	1658	1075	408	9137	1745	985	502	1477	593	612	337	6251	6727	22115	23248
3843	328	785	1710	1684	1120	447	9917	1786	1012	556	1532	667	643	359	6555	7705	24177	46415
63.9	44.2	43.3	53.2	68.3	51.4	40.3	70.8	79.2	69.5	60.1	57.4	57.6	22.9	42.6	81.3	44.0	91.5	
83.6	79.7	47.7	65.2	50.2	59.4	22.6	75.6	49.4	55.7	35.3	35.4	38.2	45.2	26.9	56.4	75.2	95.1	

Appendix 13

SURVEY OF EARNED DOCTORATES

AWARDED IN

THE UNITED STATES

SPONSORED AND CONDUCTED BY

THE GRADUATE DEANS,
THE NATIONAL ACADEMY OF SCIENCES–NATIONAL RESEARCH COUNCIL,
THE U.S. OFFICE OF EDUCATION AND THE NATIONAL SCIENCE FOUNDATION

IN COOPERATION WITH

The American Council of Learned Societies
and The Social Science Research Council

TO BE RETURNED TO
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Who Wants This Informatio.., and Why?

Educators, employers, the scientific and professional community, and the nation generally are vitally interested in accurate up-to-date information on all doctorate holders. Aspects of this interest include the number graduating in each of the various fields, rate of increase, where these scholars come from, their routes to the doctoral degree, and employment plans made prior to graduation.

The interest of the graduate schools is evidenced by the cooperation of all the Graduate Deans of the United States and Territories in distributing these questionnaires to you and other doctoral candidates, collecting and forwarding them, and receiving reports on the data. The National Academy of Sciences-National Research Council has been conducting and publishing studies of doctorate holders from 1936 to the present time, emphasizing their schools of undergraduate origin as well as other data concerning them. The National Science Foundation maintains for the Federal Government the National Register of Scientific and Technical Personnel. This Survey of Earned Doctorates includes *all fields* in which doctorates are currently conferred: not only the natural sciences and engineering, but also the arts, languages, social sciences, etc.

Among the goals of the questionnaire is the gathering of information on persons who attain high levels of academic achievement, including data on the background factors which may be related to this success. By providing this information, you make possible improvements in policies and programs of advanced training. Also, information concerning your professional development and utilization of your training will become increasingly important when it is collected and analyzed.

What Information is Wanted, Now and Later?

The information wanted on the questionnaire to the left is largely self-explanatory. Please detach it along the perforated line, complete it, and return it to your Graduate Dean. On the back of this sheet is a Specialties List with code numbers and titles for classifying the field of your dissertation, to be used only with Items M and N of the questionnaire. If none of the detailed fields listed seems to be appropriate, note the "General" and "Other" categories. If you use a category which states parenthetically to "specify," please include the essential details in the right-hand column of Item N.

Those of you who are in the fields of natural science or engineering and certain related areas may expect to receive a questionnaire from one of the participating professional societies in the NSF's National Register of Scientific and Technical Personnel, including: the American Chemical Society, American Geological Institute, American Institute of Biological Sciences, American Institute of Physics, American Mathematical Society, American Meteorological Society, American Psychological Association, Engineers Joint Council, Federation of American Societies for Experimental Biology. One of its major purposes will be to obtain further information about your postdoctoral employment and areas of specialization.

For all doctorate holders, your cooperation in completing this questionnaire will be of great value within your particular discipline and to the scientific and scholarly community generally.

SURVEY OF EARNED DOCTORATES

A. Name *in full:* .... Last First Middle (Maiden)
(7-28)

B. Permanent address through which you can always be reached: .... Care of (if applicable)

.... Number Street City Zone State

C. Date of birth: .... Month, day, year (29, 30)
D. Place of birth: .... State; or country if not U.S. (31, 32)

E. (29) 12 ☐ Married; 11☐ Not married (including divorced, widowed)

F. 11☐ Male
(30)12☐ Female

G. (33) 0☐ U.S. Citizen
1☐ Non-U.S., permanent resident
2☐ Non-U.S., U.S. citizenship applied for
3☐ Non-U.S., other .... (if non-U.S., specify nationality)

H. (34) Number of dependents. Use U.S. income tax definition, but do not include yourself ....

DO NOT WRITE HERE

29,30 ( ) ( )
31,32
33
34
35-36
37
38
39-40
41-44
45-47 ( )
48-49

Secondary or high school last attended

I. Name and location (35,36) ....

J. Size of graduating class (37) ☐ 1-9; ☐ 10-19; ☐ 20-39; ☐ 40-59; ☐ 60-99; ☐ 100-199; ☐ 200-499; ☐ 500 and over.
0 1 2 3 4 5 6 7

K. Type of school (38) ☐ Public ☐ Private, denominational ☐ Private, non-denominational.
0 1 2

L. Year of graduation from high school (39,40) ....

M. List in the table below all collegiate and graduate institutions you have attended, beginning with the first and ending with the one from which you are about to receive your present doctoral degree:

Institution and its location	Dates attended (years only)		Check if full time	Major field		Minor field (Name)	Degree (if any)	Month & year granted
	From	To		Name	Number (see list)			

N. List title of your doctoral dissertation (if more than one, give year of degree for each) and enter the most appropriate classification *number* and *title* selected from the accompanying separate Specialties List:

Title of dissertation(s)	Classify, using Specialties List	
	Number	Field Name

O. Please check the box which most fully describes your employment status during the year preceding the doctorate award. (68)
0 ☐ Student, part-time employed. (incl. graduate assistants)
1 ☐ Student, not employed.
2 ☐ On fellowship
Full Time Empl. in:
3☐ College or university.
4☐ Elem. or secondary school, teaching.
5☐ Elem. or secondary school, non-teaching.
6☐ Other category.
7☐ Working on research grant.
8☐ Other status. (specify) ....

P. Indicate total years of professional work experience (full time or full-time equivalent). (69)
0 ☐ None.
1 ☐ Less than 1 year.
2 ☐ 1-1.9 years.
3 ☐ 2-2.9 years.
4 ☐ 3-3.9 years.
5 ☐ 4-5.9 years.
6 ☐ 6-7.9 years.
7 ☐ 8-9.9 years.
8 ☐ 10-14.9 years.
9 ☐ 15 years or more.

Q. Indicate your prospects and arrangements for your professional future (please check only one). (70)
0 ☐ Am seeking employment but have no specific prospects.
1 ☐ Am negotiating with a specific employer, or more than one.
2 ☐ Have signed contract or made definite commitment (other than categories below).
3 ☐ Returning to, or continuing in, predoctoral employment.
4 ☐ Military service—active duty.
5 ☐ Have postdoctoral fellowship, sabbatical leave, or equivalent arrangement
6 ☐ Other (explain): ....

R. Indicate type or class of postdoctoral employer (check only one). (71)
0 ☐ U.S. college or university.
1 ☐ U.S. elementary or secondary school
2 ☐ U.S. gov't—federal civilian employee.
☐ Foreign: governmental or private.
4 ☐ State, local, or other government within the U.S. (except educational institutions).
5 ☐ Non-profit organization (other than 0, 1, 2, 3, or 4).
6 ☐ Industry or business.
7 ☐ Self-employed.
8 ☐ None.
9 ☐ Other .... (Specify)

S. Place of postdoctoral employment (state; or country if not U.S.). (72,73) ....

T. Is your postdoctoral activity primarily 0☐ Research 1☐ Teaching 2☐ Administration 3☐ Professional services
4 ☐ Fellowship 5☐ Other (explain) (74) ....

U. Indicate, by circling highest grade attained, the education of

(75) your father:	none	1 2 3 4 5 6 7 8	9 10 11 12	1 2 3 4	MA, MD, PhD	Postdoctoral
		grammar school	High sch	College	Graduate	
(76) your mother:	none	1 2 3 4 5 6 7 8	9 10 11 12	1 2 3 4	MA, MD, PhD	Postdoctoral

W. Enter here the name of your major adviser
.... (last name)
.... (first name, middle initial)

V. How many older brothers did you have? (if none, write zero) (77) ....
older sisters? (78) .... younger brothers? (79) .... younger sisters (80) ....

X. List all national professional societies of which you are a member. Write out identifying words in full:

....

DO NOT WRITE HERE

50-53
54-56 ( )
57,58
59-62
63-65 ( )
66,67 ( )
68
69
70
71
72,73
74
75,76
77,78
79,80

Write in any supplementary information which you believe necessary to complete or explain your answer, or your inability to answer any previous items, referring to each item by letter, on the back of this sheet.

Date prepared .... Signature ....

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SPECIALTIES LIST

For Use With Items M And N Of The Questionnaire For The

SURVEY OF EARNED DOCTORATES

Mathematics

000—Algebra
010—Analysis
020—Geometry
030—Logic
040—Number Theory
050—Probability, Math Stat.
(see also 544, 670, 725, 920)
060—Topology
070—Topol. Algebraic Structures
080—Computing Theory & Practice
085—Applied Mathematics

098—Mathematics, General
099—Mathematics, Other
(note also 984: Math Educ.)

Physics and Astronomy

(Note: Theoretical scientists mark "T" on questionnaire following code No.)

100—Astronomy

110—Atomic & Molec. Physics
120—Electricity & Magnetism
130—Mechanics
132—Acoustics
134—Fluids
136—Optics
138—Thermal Phenomena
140—Elementary Particles
150—Nuclear Structure
160—Solid State

198—Physics, General
199—Physics, Other

Chemistry

200—Analytical
210—Inorganic
220—Organic
230—Nuclear
240—Physical
250—Theoretical
260—Agricultural & Food
270—Pharmaceutical

298—Chemistry, General
299—Chemistry, Other

(see also Biochemistry, 540)

Earth Sciences

300—Mineralogy, Petrology, Geochemistry
310—Stratig.-sedimentation
320—Paleontology
330—Structural Geology
340—Solid Earth Geophysics
350—Geomorph., Glacial Geology
360—Hydrology
370—Oceanography
380—Meteorology
390—Applied Geol.: Geol. Engr.; Econ. Geol.; Petroleum Geol.

398—Earth Sciences, General
399—Earth Sciences, Other

Fields Not Elsewhere Classified

899—Sci., General; Sci., Other; Other General Field

Engineering

400—Aeronautical
410—Agricultural
420—Civil
430—Chemical
435—Ceramic
440—Electrical
445—Electronics
450—Industrial
460—Engineering Mechanics
465—Engineering Physics
470—Mechanical
475—Metallurgy & Met. Engineering
480—Sanitary
485—Textile

498—Engineering, General
499—Engineering, Other

Agricultural Sciences

500—Agronomy
502—Animal Husbandry
504—Fish & Wildlife
505—Forestry
506—Horticulture

508—Agriculture, General
509—Agriculture, Other

Medical Sciences

510—Medicine & Surgery
511—Pharmacy
512—Public Health
513—Veterinary Medicine
514—Hospital Administration

518—Medical Sciences, General
519—Medical Sciences, Other

Biological Sciences

520—Anatomy
522—Cytology
524—Embryology
530—Physiology, Animal
532—Physiology, Plant
534—Pathology
536—Pharmacology
540—Biochemistry
542—Biophysics
544—Biometrics, Biostatistics
(see also 050, 670, 725, 920)
550—Botany
552—Phytopathology
560—Ecology
582—Entomology
570—Genetics
562—Hydrobiology
564—Microbiology
580—Zoology

598—Bio-Science, General
599—Bio-Science, Other

Psychology

600—Clinical
610—Counseling & Guidance
620—Developmental Gerontological
630—Educational
641—Experimental
642—Comparative
643—Physiological
650—Industrial & Personnel
660—Personality
670—Psychometrics
(see also 050, 544, 920)
635—School Psychology
680—Social

698—Psychology, General
699—Psychology, Other

Social Sciences

700—Anthropology
705—Archeology
745—Area Studies (specify area)
720—Economics
725—Econometrics & Statistics
(see also 050, 544, 670, 920)
730—History
740—Geography
755—International Relations
750—Political Science, Public Admin.
760—Social Work
710—Sociology

798—Social Sciences, General
799—Social Sciences, Other

Arts & Humanities

800—Art, Fine & Applied (incl. hist. & crit.)
810—English Language & Lit. (incl. Amer.)
820—Foreign Lang. & Lit. Modern (specify)
822—Foreign Lang. & Lit. Classical (specify)
825—Linguistics
830—Music
840—Philosophy
815—Speech & Dramatic Arts

888—Arts & Humanities, General
889—Arts & Humanities, Other

Prof. Fields Not Listed Above

850—Business Administration
855—Home Economics
860—Journalism
865—Law, Jurisprudence
870—Library & Archival Science
880—Religion & Theology

Education

Note: For fields 900-947 and 960-967 final digit indicates level: 0—unspecified; 1—preschool; 2—elem.; 3—secondary; 4—teacher training; 5—higher educ.; 6—adult educ.; 7—other.

900—Foundations: Social, Philosoph.
908—Elem. Educ., General
909—Secondary Educ., General
910—Educational Psychology
920—Educ. Meas. & Stat.
930—Educ. Admin. & Superv.
940—Guid., Couns., Student Pers.
950-959—Special Education
    950—Field Unspecified
    952—Gifted
    954—Speech
    956—Phys. Handicapped
    958—Emot. & Ment. Handicapped
960—Audio-Visual Media

Note: For fields 970-997, and 952-959 even number is for secondary level; next odd number indicates other than secondary level.

970—Agric.
972—Art
974—Business
976—English
978—Foreign L.
980—Home Ec.
982—Ind. Arts
984—Math
986—Music
988—Phys. Ed., Health & Recreation
990—Science Educ.
992—Social Sci. Educ.
994—Vocational Educ.
996—Other Special Field
998—Educ., General
999—Educ., Other

NATIONAL ACADEMY OF SCIENCES—
NATIONAL RESEARCH COUNCIL

The National Academy of Sciences–National Research Council is a private, nonprofit organization of scientists, dedicated to the furtherance of science and to its use for the general welfare.

The Academy itself was established in 1863 under a Congressional charter signed by President Lincoln. Empowered to provide for all activities appropriate to academies of science, it was also required by its charter to act as an adviser to the Federal Government in scientific matters. This provision accounts for the close ties that have always existed between the Academy and the Government, although the Academy is not a governmental agency.

The National Research Council was established by the Academy in 1916, at the request of President Wilson, to enable scientists generally to associate their efforts with those of the limited membership of the Academy in service to the nation, to society, and to science at home and abroad. Members of the National Research Council receive their appointments from the President of the Academy. They include representatives nominated by the major scientific and technical societies, representatives of the Federal Government, and a number of members at large. In addition, several thousand scientists and engineers take part in the activities of the Research Council through membership on its various boards and committees.

Receiving funds from both public and private sources, by contributions, grant, or contract, the Academy and its Research Council thus work to stimulate research and its applications, to survey the broad possibilities of science, to promote effective utilization of the scientific and technical resources of the country, to serve the Government, and to further the general interests of science.